REQUEST FOR PROPOSALS
ATL SOLICITATION # 26-002

TRANSIT OPERATIONS AND MAINTENANCE SERVICES For ATLANTA-REGION TRANSIT LINK AUTHORITY and GWINNETT COUNTY

ATTACHMENT 8

CONTENTS

ATL Transit Asset Management Plan

2022

Transit Asset Management (TAM) Plan

Atlanta-Region Transit Link Authority (ATL)

11/18/2022

TAM Plan Update and Approval

2022 Complete Update

Reason for Update	Created By	Title
Full plan update	Jorge Pubillones	Asset Management Administrator

Version and Revision Record

Version Number	Sections/Pages Affected	Tables Affected
001	Sections 4 and 6/Pages 15, 39, and 40	4.1 and 6.3
002	All	All
003	Sections 3.1, 4.1.2, 5.2.1, 5.2.2/Pages 25-27, 29-30, 34-35	3.1, 3.1.3, 4.2, 4.3

Approval Record

Name of Accountable Executive	Signature	Date
Heather Aquino	Heather Aquino	12-7-2022

Document Version and Effective Date

Original or Update TAM Plan	Original or Update Date	Release Date
Original	June 15, 2018	June 15, 2018
Partial Update – Version 001	February 12, 2021	March 24, 2021
4-Year Update – Version 002	September 30, 2022	October 1, 2022
Data Update – Version 003	November 18, 2022	December 07, 2022

Contents

EXECUTIVE SUMMARY

This Transit Asset Management Plan (TAMP) establishes the approach to achieve a State of Good Repair (SGR) for the Atlanta-Region Transit Link Authority (ATL) Xpress Commuter Bus Service transit capital assets, in compliance with requirements established by the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012; the Fixing America's Surface Transportation (FAST) Act of 2015, and further defined by the Federal Transit Administration's (FTA's) Final Rule on Transit Asset Management (49 CFR 625 and 630) of 2018. The Bipartisan Infrastructure Law of 2021 provides increased funding in support of SGR activities such as repair and maintenance of transit systems to reduce backlog, modernization of fleets and introduction of electric fleets.

Agency Background

Atlanta-Region Transit Link Authority (ATL) is a state-level, independent Authority created in 2018 by the State of Georgia via House Bill (HB) 930 to serve as a regional transit planning, funding, and policy oversight authority. Its primary purpose is to provide a more seamless customer experience across multiple transit systems operating in the 13-county Atlanta region. With the support of its many transportation partners, the ATL is designed to develop and advance a strategic regional transit plan that will help ensure metro Atlantans remain mobile, connected, and capable of accessing opportunities across the region it serves.

In 2020, the Xpress service previously provided by the State Road and Tollway Authority (SRTA) was transferred to the ATL. As a transit provider, the Authority is subject to the Federal regulations on asset management.

ATL operates Xpress in the Metro Atlanta Region. Xpress provides commuters throughout the Metro Atlanta area with a valuable transportation option and improves the capacity of Georgia's most congested highways. Xpress services 27 park-and-ride lots and operates 27 routes in 12 Metro Atlanta counties. From FY2015 to FY2019, the average annual ridership was 1,680,559 passenger trips. The emergence of COVID-19 in March of 2020 partially impacted the annual ridership for FY2020, the annual ridership for FY2020 was 1,362,125. In FY2021, it dropped significantly to 187,317. Ridership increased in FY2022 to 369,597.

As of June 30, 2022, ATL Xpress has an active fleet of 147 buses: 116 in operation and 31 in contingency fleet being rotated in and out of service to maintain State of Good Repair as required by FTA and in agreement with the requirements of the 2022 ATL Xpress Public Transportation Agency Safety Plan.

In FY22, the 2009 MCI fleet (19 buses) was retired and ATL is processing them for disposal. ATL Xpress added one new bus in FY22 and is receiving and processing for service another 18 buses. ATL contracts with Transdev North America and Cobb County (CobbLinc) to operate the ATL Xpress service.

ATL Xpress operates in 12 surrounding counties, all within the metro Atlanta area. Xpress operates service in the following counties: Cherokee, Clayton, Coweta, Cobb, DeKalb, Douglas, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale. Riders are drawn from 44 counties as Xpress provides reliable commutes to and from major employment centers in Downtown Atlanta, Midtown, Buckhead, Perimeter Center and MARTA rail system.

During the COVID-19 pandemic, Xpress maintained limited service on all routes to ensure customers still had the option of public transportation available to them. Like other transit agencies in the region, Xpress has experienced a severe reduction in ridership. The reported Xpress ridership is at 22% of pre-COVID levels, this figure does not consider the reduction in service pending regional business/agency return to office plans. A comparison based on daily boardings, show Xpress to be more in the range of 45% to 50% of pre-Covid ridership. Xpress will conduct a planning study in the 2nd Quarter of FY23 to develop a Route Restoration Plan. The implementation of the plan will increase revenue service with a corresponding improvement in ridership levels. The goal is to return to pre-pandemic levels or higher.

TAM Plan Summary

In July 2016, the FTA issued its Final Rule regarding Transit Asset Management (TAM). This rule:

- Required grantees to develop a TAM plan by July 2018
- Mandated grantees to update the plan every four years and/or when significant changes take place
- Defined State of Good Repair (SGR) for assets used to provide transit services
- Established the performance measures to be included in the plan
- Contains annual reporting requirements to the National Transit Database (NTD), and
- Defines role of the Accountable Executive and requires grantees to identify him/her in the plan

ATL's 2022 TAM Plan updates the original version approved by the Accountable Executive on July 2018 and summarizes how staff, processes, and tools at ATL Xpress will support the Authority's asset management effort. It provides information about strategic initiatives that ATL will execute to integrate asset management into decision-making and other practices regarding maintenance, capital reinvestment, service delivery, lifecycle cost management, and resilience. Additionally, it provides information on communication of asset management activities across and beyond ATL's organization. This TAM Plan includes a detailed TAM Policy which supports and aligns with Authority's strategic plan, goals, and objectives. The TAM Plan empowers ATL's Executive Director and the Xpress Transit Operations Team to implement this plan, with the Asset Management Administrator providing leadership and coordination. Summarized below is ATL's commitment to improve asset management during the four-year horizon of this plan. This TAM Plan will enable ATL to:

- Continue improving and consolidating responsibilities, governance, and inventory information
- Highlight opportunities for consistent business processes for all asset management practices
- Clearly identify importance of asset management roles and responsibilities
- Assist in developing strategic asset management plans for all critical asset classes and improve maintenance practices and replacement/renewals cycles
- Ensure consistency and standard practices in considering whole life cycle costing in asset renewal plans
- Include consistent consideration of asset performance and condition in maintenance planning
- Complete the implementation of the new Enterprise Asset Management System (EAMS) software and use it as a tool for improved asset management activities

- Reinforce continuous improvement by focusing on asset information to support decision making and capital planning processes. ATL will use these processes for the stewardship of a safe and reliable transit system
- Show relationship between the plan and FTA TAM Requirements

FTA's Final Rule for TAM requires that the TAM Plan for Tier 1 agencies address nine essential elements. Table 1-1 lists and describes these elements with cross-references to where each of the FTA elements are addressed in ATL's TAM Plan.

Table 1-3 FTA TAM Plan Requirements (Sources: 49 CFR 625.25 Parts C and D)

TAM Plan Elements		Description	ATL TAM Plan Section
1	Asset Inventory	A register of capital assets and information about the assets	Chapter 3
2	Transit Asset Conditions Assessment	A rating of the assets' physical state, to be completed for assets an agency has direct capital responsibility for; should be at a level of detail sufficient to monitor and predict performance of inventoried assets	Chapter 4
3	Decision Support Tools	Analytic processes or tools that (1) assist in capital asset investment prioritization and/or (2) estimate capital needs over time	Chapter 5
4	Prioritization	A prioritized list of projects or programs to manage or improve the SGR of capital assets	Chapter 5
5	TAM and SGR Policy	Executive-level direction regarding expectations for transit asset management; a TAM strategy consists of the actions that support the implementation of the TAM policy	Chapter 2
6	Implementation Plan	A series of action steps for an agency to take to obtain and maintain a State of Good Repair. Addresses not only capital projects but also process and program capability improvements	Chapter 6
7	List of Annual Activities	The actions needed to implement a TAM Plan for each year of the plan's horizon	Chapter 6
8	Resources	A summary or list of the resources that a provider needs to develop and carry out the TAM Plan	Chapter 6
9	Monitoring, Evaluation, and Updates	An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure continuous improvement	Chapter 7

TAM Plan Content

This document consists of the Executive Summary and seven chapters as follows:

Chapter 1: Introduction – Provides an overview of ATL Xpress, TAM history, and Asset Management. Provides context for Asset Management and its importance to transit in the Atlanta metro area and ATL as one of the providers of transit service.

Chapter 2: TAM and SGR Policy – Presents ATL's commitment to implementing a strategic process for acquiring, operating, maintaining, upgrading, and replacing transit assets to directly support the agency's mission of providing innovative transportation choices and financial solutions for the state.

Section 3: Capital Asset Inventory – Summarizes ATL's current asset inventory in support of transit service. Xpress relies on three key asset groups: revenue vehicles, facilities, and equipment (including non-revenue vehicles).

Section 4: Asset Condition Assessment and SGR Ratings, Performance Targets and Measures – Summarizes ATL's current asset condition. Xpress relies on three key asset groups: revenue vehicles, facilities, and equipment (including non-revenue vehicles). ATL uses a physical condition inspection process to assess the condition of the primary asset groups that support Xpress. This section also presents a snapshot of asset conditions, and targets for SGR measures.

Section 5: Prioritization, Reinvestment and Decision Support Tools – Presents ATL's investment prioritization and reinvestment method that emphasizes asset condition, risk of failure and service impact, and safety. ATL uses the FTA's TERM Lite program as a transit decision-support tool, which can project capital investment needs over a 20-year period.

Section 6: Implementation, Annual Activities and Resources – Describes ATL's implementation program for asset management. This includes an action plan, an implementation timeline, a list of key annual activities, and identification of required resources.

Section 7: Monitoring, Evaluation and Continual Improvement – Details a structure for the monitoring and evaluation of progress against the Plan to ensure continual improvement, as well as criteria and a process by which the Plan can be revised periodically during its four-year time horizon.

Appendices – Glossary and information used in the TAM plan, reference documents, and sample material used in asset management.

Asset Inventory

ATL has assets in three of the Asset Categories defined in FTA's Final Rule for TAM. Table 3-1 provides a summary of the assets by Asset Category and Class.

Table 3-1 Asset Inventory Summary

Asset Category/Class	Total Number	Average Age	Average LTD Mileage	Replacement Cost/Value
Revenue Vehicles				
BR – Over-the-road Bus	147	4.29	233,816	$109,542,797

Equipment				
Non-Revenue/Service Vehicles	8	10.38	58,193	$526,412
Other Rubber Tired Vehicles	2	7.08	48,122	n/a (service contractor will provide)
Facilities				
Administration (Owned-SRTA)	1	5	n/a	$3,367,652
Maintenance (Owned-SRTA)	1	5	n/a	$16,447,593
Passenger (Owned-SRTA)	8	13.25	n/a	$26,794,653
Passenger (Custodial Rights-SRTA)	2	16.50	n/a	$6,698,663

Condition Assessment and SGR

A condition assessment inspection of the assets used to provide transit service was performed in 2021. Table 4-2 provides a summary of the average SGR scores by Asset Category and Class.

Table 4-2 Asset Condition Assessment Summary

Asset Category/Class	Total Number	Average SGR Score	Condition Assessment Completed	Replacement Cost/Value
Revenue Vehicles				
BR – Over-the-road Bus	147	4.49	Representative Sampling of fleet	$109,542,797
Equipment				
Non-Revenue/Service Vehicles	9	4.51	All	$526,412
Other Rubber Tired Vehicles	2	3.95	All	n/a (service contractor will provide)
Facilities				
Administration (Owned-SRTA)	1	3.34	All	$3,367,652
Maintenance (Owned-SRTA)	1	3.34	All	$16,447,593
Passenger (Owned-SRTA))	8	3.52	All	$26,794,653
Passenger (Custodial Rights-SRTA)	2	3.06	All	$6,698,663

Note: The non-revenue fleet size was 9 at tine of the condition assessment. As of June 30, 2022, it was 8 as shown on inventory tables 3.1, 3.1.2, and 3.4. One vehicle was in an accident and is in process of being replaced.

1 Introduction

This Transit Asset Management Plan (TAMP) establishes the approach to achieve a State of Good Repair (SGR) for the Atlanta-Region Transit Link Authority (ATL) Xpress Commuter Bus Service transit capital assets, in compliance with requirements established by the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012; the Fixing America's Surface Transportation (FAST) Act of 2015, and further defined by the Federal Transit Administration's (FTA's) Final Rule on Transit Asset Management (49 CFR 625 and 630) of 2018. The Bipartisan Infrastructure Law of 2021 provides increased funding in support of SGR activities such as repair and maintenance of transit systems to reduce backlog, modernization of fleets and introduction of electric fleets.

1.1 Agency Overview

Atlanta-Region Transit Link Authority (ATL) is a state-level, independent Authority created in 2018 by the State of Georgia via House Bill (HB) 930 to serve as a regional transit planning, funding, and policy oversight authority. Its primary purpose is to provide a more seamless customer experience across multiple transit systems operating in the 13-county Atlanta region. With the support of its many transportation partners, the ATL is designed to develop and advance a strategic regional transit plan that will help ensure metro Atlantans remain mobile, connected, and capable of accessing opportunities across the region it serves

In 2020, the Xpress Commuter Coach Service previously operated by the State Road and Tollway Authority (SRTA) was transferred to the ATL. As a transit provider, the Authority is subject to the Federal regulations on asset management.

ATL operates Xpress in the Metro Atlanta Region. Xpress provides commuters throughout the Metro Atlanta area with a valuable transportation option and improves the capacity of Georgia's most congested highways. Xpress services 27 park-and-ride lots and operates 27 routes in 12 Metro Atlanta counties. From FY2015 to FY2019, the average annual ridership was 1,680,559 passenger trips. The emergence of COVID-19 in March of 2020 partially impacted the annual ridership for FY2020, the annual ridership for FY2020 was 1,362,125. In FY2021, it dropped significantly to 187,317. Ridership increased in FY2022 to 369,597, 22% of the pre-COVID-19 annual average.

As of June 30, 2022, ATL Xpress has an active fleet of 147 buses: 116 in operation and 31 in contingency fleet being rotated in and out of service to maintain State of Good Repair as required by FTA and in agreement with the requirements of the 2022 ATL Xpress Public Transportation Agency Safety Plan.

In FY22, the 2009 MCI fleet (19 buses) was retired and ATL is processing them for disposal. ATL Xpress added one new bus in FY22 and is receiving and processing for service another 18 buses. ATL contracts with Transdev North America and Cobb County (CobbLinc) to operate the ATL Xpress.

ATL Xpress commuter bus service operates in 12 surrounding counties, all within the metro Atlanta area. Xpress operates service in the following counties: Cherokee, Clayton, Coweta, Cobb, DeKalb, Douglas, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale. Riders are drawn from 44 counties as Xpress provides reliable commutes to and from major employment centers in Downtown Atlanta, Midtown, Buckhead, Perimeter Center, and MARTA rail system.

During the COVID-19 pandemic, Xpress maintained limited service on all routes to ensure customers still had the option of public transportation available to them. Like other transit agencies in the region, Xpress has experienced a severe reduction in ridership. The reported Xpress ridership is at 22% of pre-COVID levels, this figure does not consider the reduction in service pending regional business/agency return to office plans. A comparison based on daily boardings, show Xpress to be more in the range of 45% to 50% of pre-Covid ridership. Xpress will conduct a planning study in the 2nd Quarter of FY23 to develop a Route Restoration Plan. The implementation of the plan will increase revenue service with a corresponding improvement in ridership levels. The goal is to return to pre-pandemic levels or higher.

Table 1-1 Xpress Annual Operating Statistics

	Ridership	Revenue Hours	Revenue Miles	Farebox Recovery Ratio
FY 2015	1,646,519	101,651	2,594,964	26.1%
FY 2016	1,548,876	103,257	2,640,033	22.7%
FY 2017	1,626,252	110,328	2,498,086	20.9%
FY 2018	1,687,030	112,335	2,311,808	20.4%
FY 2019	1,894,119	241,755	2,511,035	22.6%
FY 2020	1,362,125	206,941	2,217,893	23.5%
FY 2021	187,317	53,372	1,284,870	4.5%
FY2022	369,597	59,357	1,498,104	6.02%

Table 1-2 ATL Xpress Contractors and Fleet Inventory

Contractor	Location	Number of ATL Routes	Peak Buses	Spare Buses [1]	Contingency Fleet [2]	Total Buses
Transdev North America	5250 Frontage Rd., Forest Park, GA	14	48	22	6	76
Transdev North America	2880 Remington Park Ct., Norcross, GA	11	25	12	19	56
Cobb County (CobbLinc)	463 Commerce Park Dr. SE, Suite 112, Marietta, GA	2	6	3	6	15
Total Xpress 2022		27	79	37	31	147

[1] Reflects FTA waiver of the 20% Spare Ratio approved 2/8/2022.

[2] This fleet is being rotated in and out of service to ensure vehicles are maintained in a good SGR status.

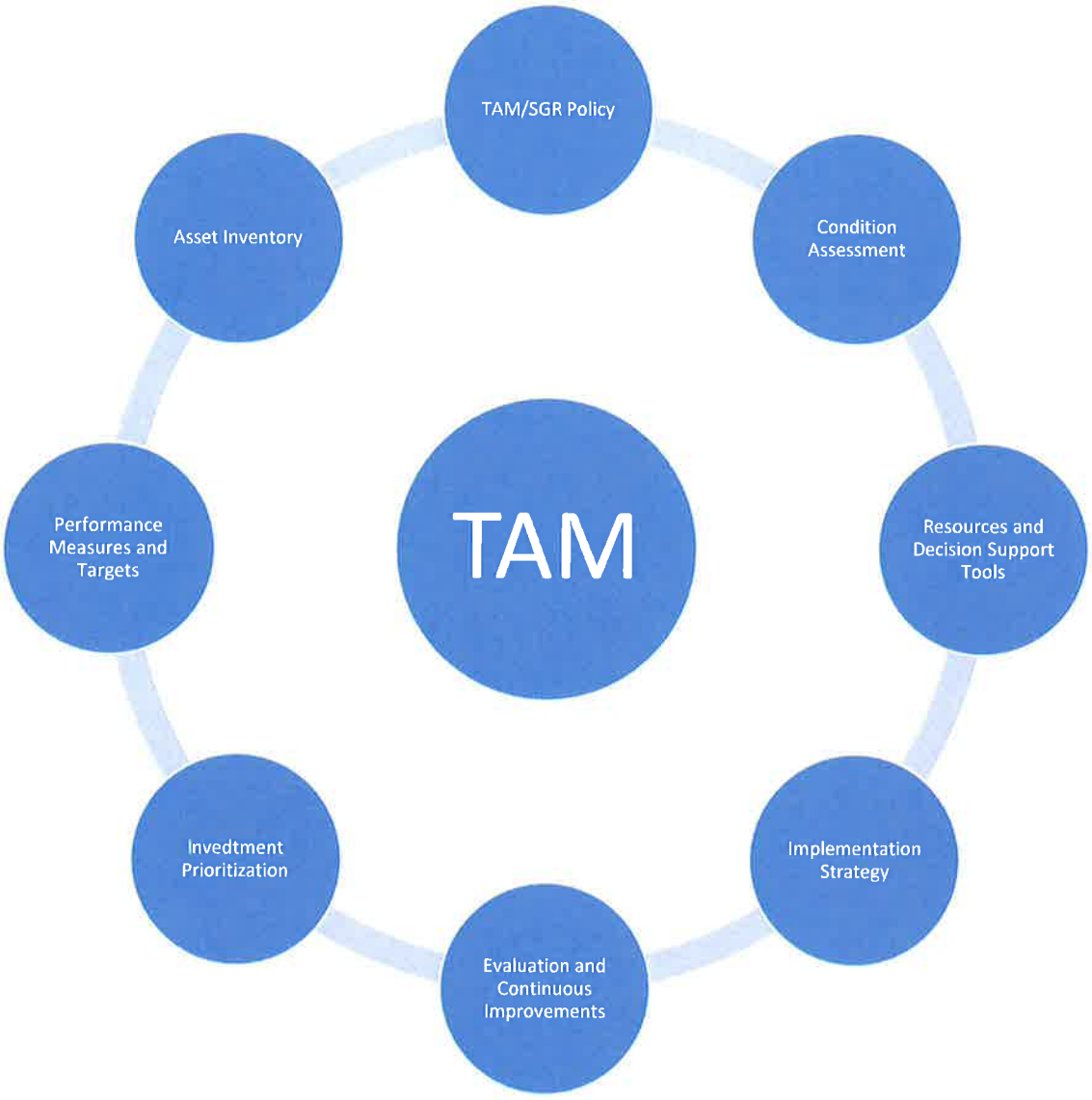
1.2 What is Transit Asset Management?

Asset Management is the set of practices, policies, and procedures that ensure ATL achieves maximum value from its assets for its customers. While this description can be applied to asset management in any industry, the Federal Transit Administration (FTA) specifically defines transit asset management (TAM) as: "[T]he strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their lifecycles to provide safe, cost-effective, and reliable public transportation. TAM uses transit asset condition to guide how to manage capital assets and prioritize funding to improve or maintain a state of good repair."

According to the FTA, the term "asset" refers to physical equipment and infrastructure including rolling stock, right-of-way, stations, facilities, systems, tools, etc. that make up a transit system.

Figure 1-1 provides a picture of the many elements of TAM and the graphically illustrates the fact that all are related and dependent on each other to achieve a State of good Repair.

Figure 1-1 TAM Elements



1.3 Vision, Mission, and Goal

1.3.1 Vision

Connecting people, jobs, and communities through preferred mobility options and innovative solutions.

1.3.2 Mission

To be an integral component of Georgia's mobility network and a national leader for innovative transportation.

1.3.3 Goal

To provide reliable service to ATL's Xpress customers. The major measurable action items to achieve the goal are listed below.

Performance of scheduled preventive maintenance inspections and proper repairs as needed to both revenue and non-revenue fleets.

- Achieve 100% on-time Preventive Maintenance Inspections (PMI) performance every year
- Repair all defects identified within 5-days and perform daily audits to confirm repair was completed correctly

Identification and tracking of hazard risks with implementation and verification of mitigating solutions. Regularly scheduled safety and security training to include any required TSA and/or FTA training.

- Identify all existing and potential hazards on the applicable tracking document. As needed, implement hazard mitigation action and review to ensure expected results were achieved
- Schedule monthly training sessions to reinforce safe and secure operation. This may include exercises to determine ability to identify suspicious packages and potential IEDs on buses
- Complete required TSA annual training and other FTA recommended training exercises

Strategic and orderly implementation of the capital replacement plan.

- Replace the 2009 fleet by December 2022
- Procure and place in service 10 electric buses replacing older diesel technology by July 2023
- Replace the 2011 fleet by 2025
- Replace the 2004 fleet (rehab in 2017/2018) by 2026

Prioritization of SGR repairs at all owned maintenance, operations, and passenger facilities.

- Complete repairs from 2021 condition assessment reports by 2026

Prioritization of SGR repairs at all leased passenger facilities.

- Coordinate with owners to complete all repairs by 2026

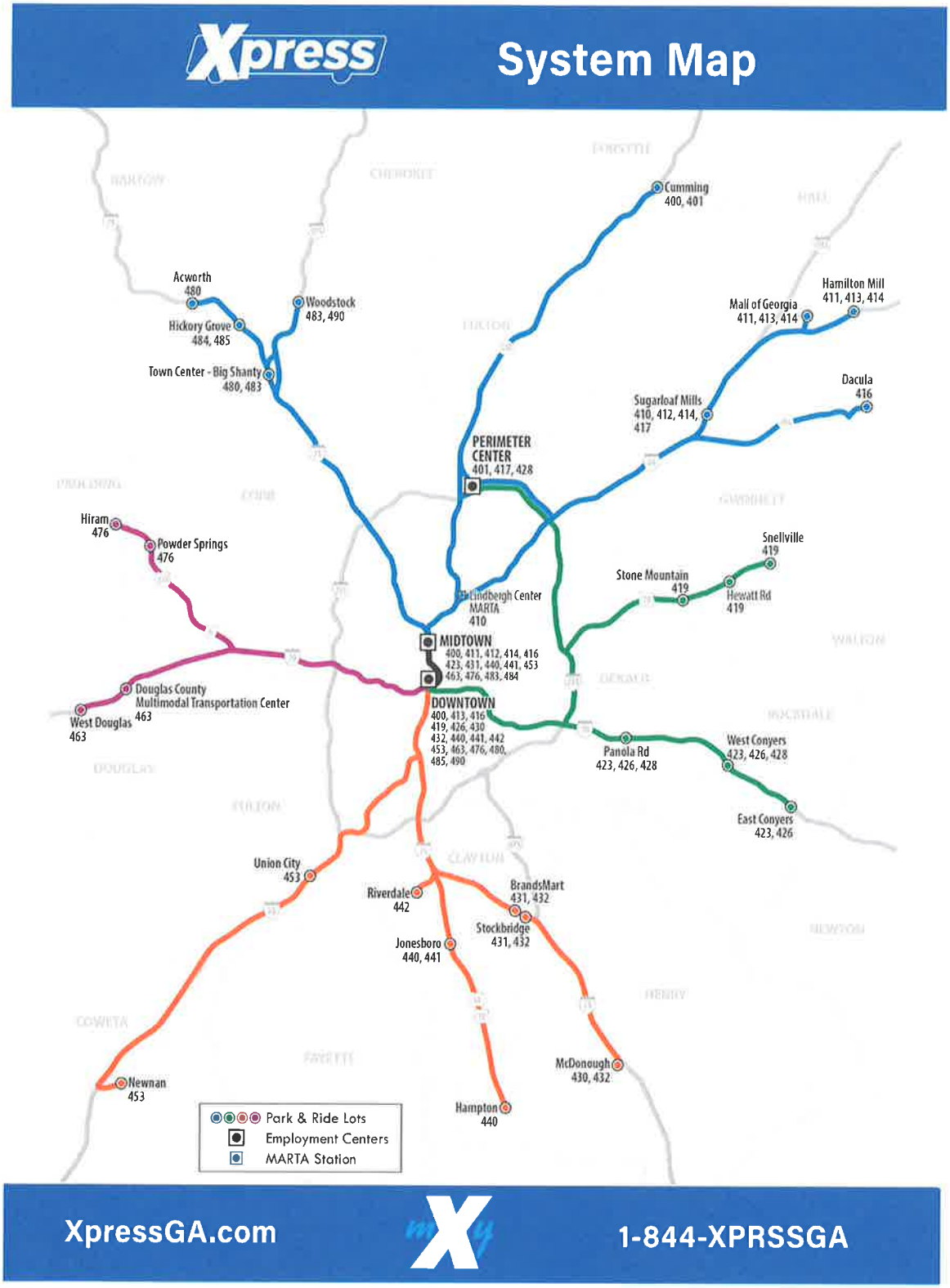
1.4 Agency Service Area

The ATL Xpress Commuter Coach Service is designed to be a high quality, reliable service that represents an attractive transportation alternative for the region's commuters. The service connects commuters from the Atlanta suburbs to major employment centers including Downtown Atlanta, Midtown, Buckhead, and Perimeter Center. Xpress partners with Metropolitan Atlanta Rapid Transit Authority (MARTA) to offer convenient connections for last mile connections

ATL Xpress operates 27 commuter bus routes in 12 metro Atlanta counties (Cherokee, Clayton, Coweta, Cobb, DeKalb, Douglas, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale) carrying about 1.5 million passengers annually (pre-Covid-19). Riders are drawn from 44 counties as Xpress provides reliable commutes to and from major employment centers in Downtown Atlanta, Midtown, Buckhead, and Perimeter Center.

These routes connect riders from 27 park and ride lots located along five highway corridors that radiate from the city center (Figure 1 1), ranging from roughly 15 to 40 miles in length (one way), which is also the range of distances of the park and ride lots from the city center. Xpress improves the capacity of Georgia's most congested roads and highways.

Figure 1-2 ATL Xpress Service Area



1.5 Agency's TAM History

In 2016, the first TAM plan was developed by the Georgia Regional Transit Authority (GRTA) which was operating Xpress at the time. This plan was completed prior to the publishing of the FTA TAM Final Rule.

In 2018, the TAM plan was updated by the State Road and Tollway Authority (SRTA) which had taken over operations of Xpress. This plan complied with the requirements of the FTA TAM Final Rule for Tier 1 transit agencies. The plan provided current condition and performance of the assets used to support the Xpress commuter bus service, and a 5- to 20-year capital plan to address existing and anticipated reinvestment needs. This document is an update to the 2018 plan.

The TAM Plan is a living document that provides a strategy to continually improve business processes as well as the activities and tools necessary to give ATL the ability to manage its assets in an effective and sustainable way. While this TAM Plan covers a period of four years after its release date, as stipulated by the TAM Rule, the TAM Plan may be updated at any time during the four-year period, based on the process detailed in Chapter 6. The FTA suggests that the document be amended if there is a substantial change to the asset inventory or the condition of assets, or if there is a significant modification to investment prioritization processes.

1.6 Federal TAM Requirements

Federal regulations for TAM (49 US CFR 625) require transit service providers to establish asset management performance measures and targets, develop a TAMP, and report on asset performance to the National Transit Database (NTD). The TAM Final Rule was published on July 26, 2016, and went into effect on October 1, 2016. Per the Final Rule, ATL's Xpress Commuter Coach Service is a Tier I provider, defined as a provider that "owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular or in any one non-fixed route mode, or (2) rail transit" (49 CFR Part 625.5).

1.7 TAM Tier 1 Agency Requirements

As a Tier I provider, ATL must develop a TAMP, updated every four years at a minimum. TAMPs must include all assets used in the provision of public transit, including assets that are owned by a third party or shared. For non-vehicle equipment assets, only those valued greater than $50,000 that are not third-party assets are required to be included in the TAMP. It also requires the agency to address all nine essential elements in the plan.

1.8 NTD Reporting Requirements

The FTA Final Rule also requires that asset inventory and condition information be reported to the NTD on an annual basis. The NTD Narrative Report should describe the condition of the transportation system and report on the SGR performance targets for the upcoming year.

The latest ATL NTD Narrative Report (FY21) is provided in Appendix C. It describes changes in the transportation system condition since the prior year and progress on meeting the previous year's performance targets.

1.9 Organization of the TAM Plan

FTA's Final Rule for TAM requires that the TAM Plan address nine essential elements. Table 1-3 lists and describes these elements with cross-references to where each of the FTA elements are addressed in ATL's TAM Plan.

Table 1-3 FTA TAM Plan Requirements (Sources: 49 CFR 625.25 Parts C and D)

TAM Plan Elements		Description	ATL TAM Plan Section
1	Asset Inventory	A register of capital assets and information about the assets	Chapter 3
2	Transit Asset Conditions Assessment	A rating of the assets' physical state, to be completed for assets an agency has direct capital responsibility for; should be at a level of detail sufficient to monitor and predict performance of inventoried assets	Chapter 4
3	Decision Support Tools	Analytic processes or tools that (1) assist in capital asset investment prioritization and/or (2) estimate capital needs over time	Chapter 5
4	Prioritization	A prioritized list of projects or programs to manage or improve the SGR of capital assets	Chapter 5
5	TAM and SGR Policy	Executive-level direction regarding expectations for transit asset management; a TAM strategy consists of the actions that support the implementation of the TAM policy	Chapter 2
6	Implementation Plan	A series of action steps for an agency to take to obtain and maintain a State of Good Repair. Addresses not only capital projects but also process and program capability improvements	Chapter 6
7	List of Annual Activities	The actions needed to implement a TAM Plan for each year of the plan's horizon	Chapter 6
8	Resources	A summary or list of the resources that a provider needs to develop and carry out the TAM Plan	Chapter 6
9	Monitoring, Evaluation, and Updates	An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure continuous improvement	Chapter 7

2 TAM and SGR Policy

The purpose of the policies outlined in this section is to maintain the revenue fleet in a state of good repair and to provide Xpress's customers safe and reliable transit service. As part of the revenue fleet asset management strategies, ATL has established maintenance goals, maintenance responsibilities, and key performance indicators. Details on the Xpress operations performance targets are found in Chapter 4 of the plan.

The objective of the TAMP process is to provide ATL with the following elements:

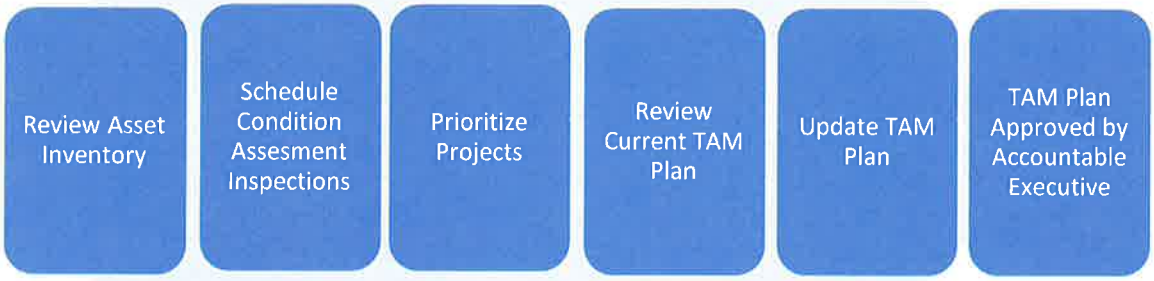
Inventory: An accurate up-to-date inventory of all capital assets.

Condition and Performance: An assessment of the current assets' physical conditions, service performance (fleet), as well as the identification of where service assets are deficient with respect to condition and performance.

Funding Scenarios: Analyses of the impact of funding reinvestment at levels that are at or below that required to address known and anticipated reinvestment needs.

Project Prioritization: A summary of the anticipated state of good repair investments selected for the time horizon of the TAMP (i.e., four years) The planning process culminates with an updated version of this TAMP document. The ATL TAMP consolidates the investment analyses and the need and investment plan and integrates them into the asset management program. The TAMP is intended to inform, guide, and justify ATL's reinvestment planning and budgeting efforts. While the document's level of detail is oriented towards the needs of ATL's asset managers (for fleet, facilities, technology, and equipment), it is also intended to furnish materials and understanding to support decision making by Senior management, board members, and funding partners. A graphical representation of the TAMP update process is provided in Figure 2.1

Figure 2-1 TAM Plan Update Process



Note that each step in the process relies on information and analysis from prior steps. Hence, while most steps can be initiated with only partial information from the prior step, no individual step can be fully completed until its predecessor has also been completed.

2.1 TAM Roles and Responsibilities

ATL's Asset Management policy aims to build whole-life (i.e., lifecycle) asset planning. This requires balancing costs, opportunities, and risks against the performance of the asset. Therefore, Asset Management activities must be coordinated and communicated across multiple departments and functional boundaries.

This TAM Plan defines Asset Management roles and responsibilities across the organization as follows:

- Accountable Executive (AE) – Pursuant to 49 CFR 625, ATL's Accountable Executive with ultimate responsibility for carrying out the TAM Plan and its related activities is the Executive Director of ATL/SRTA.

- Chief Transit Officer (CTO) - is responsible for the direct operation of ATL's commuter service. The CTO is responsible for developing the Authority's Asset Management framework that integrates ATL's asset management practices into one coordinated strategy, and provides the basis for continually improving asset management practices at ATL.
  The CTO provides the oversight, guidance, and governance necessary for transit assets to meet FTA SGR requirements, and steward enterprise asset data to enable ATL to make informed business decisions in the management of our assets. CTO responsibilities include maintaining this policy; establishing Enterprise Asset Management System (EAMS) software application governance standards; assisting asset owners with complying with EAM data management requirements; conducting annual audits of EAM data quality and compliance with requirements; and guiding capital planning and asset lifecycle decisions.

- The Transit Operations Manager (TOM) – is responsible for the management of the purchased transit operation of ATL's commuter bus service, ensuring quality service delivery.

- Asset Management Administrator (AMA) - is responsible for tracking all ATL's assets, updating the TAM plan as required to comply with the FTA TAM Rule, supports the development of the capital program, provides data to enable decisions throughout the asset lifecycle, and supports Xpress staff to achieve SGR for all assets. The AMA is responsible for establishing and reporting on performance measures that track progress towards meeting strategic goals and FTA-mandated SGR target setting as well as performance tracking and progress towards of ATL's asset-level SGR targets, establishing information strategy and standards, authoring the TAM Plan, codifying and making available information from the EAMS as needed, developing the asset inventory and condition assessment process, establishing policies and procedures for future condition assessments, and managing the asset registry including the development of all asset transition policies. The AMA also assists asset owners with complying with EAM data management requirements, conducting annual audits of EAM data quality and compliance with requirements.

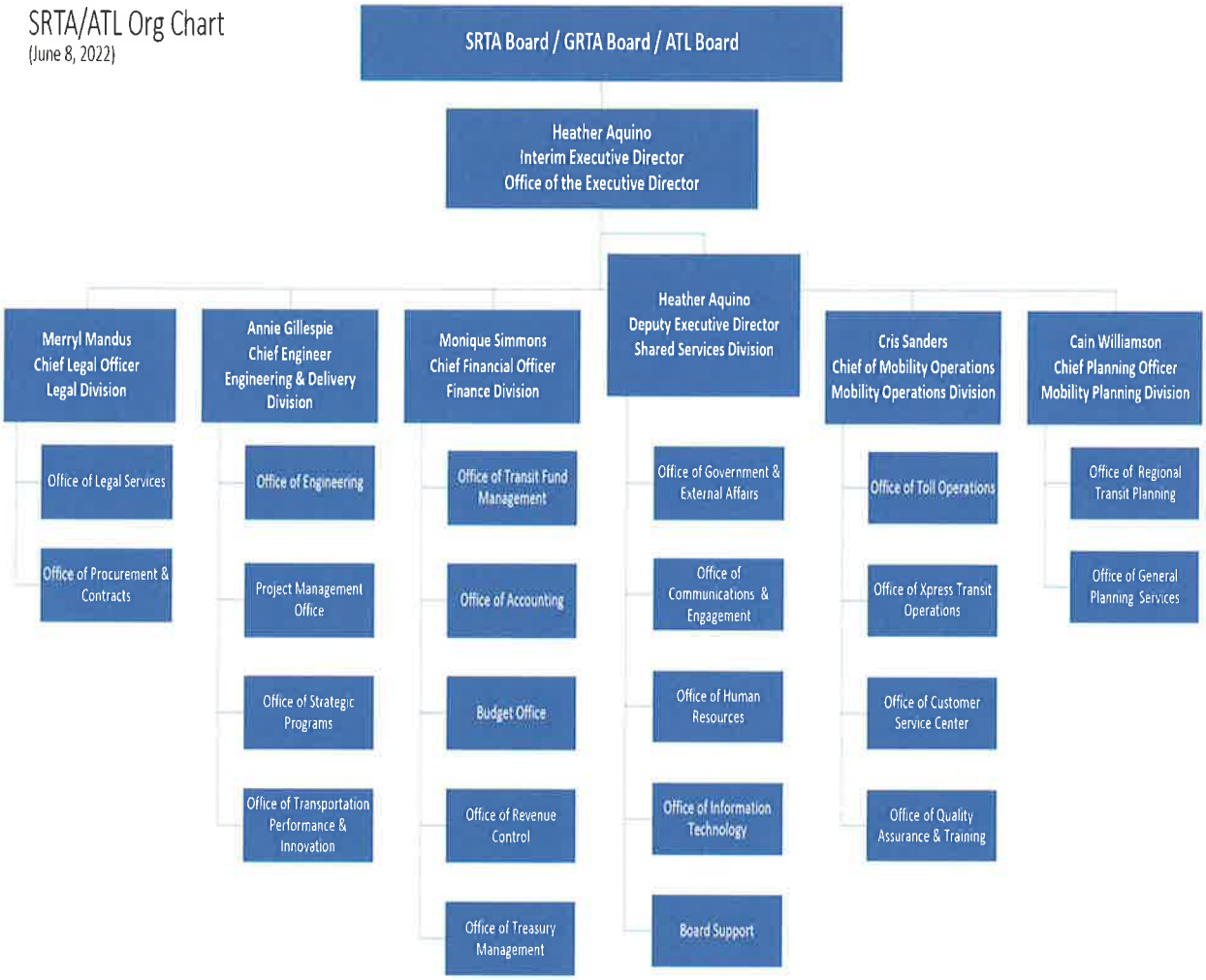
- Strategic Programs Administrator (SPA) - works in the SRTA Planning Division and supports the ATL Xpress asset management. He/she builds the authority's prioritized capital program and is the lead for Strategic Planning. The SPA delivers capital program planning oversight, reporting, and overall capital program management. The SPA ensures that the capital program aligns with identified needs and links to the executed work, and that ATL regularly makes progress towards FTA-required SGR targets.

- Transit Program Manager (TPM) - reports to the Chief Transit Officer and is responsible for oversight of the maintenance service contractors.

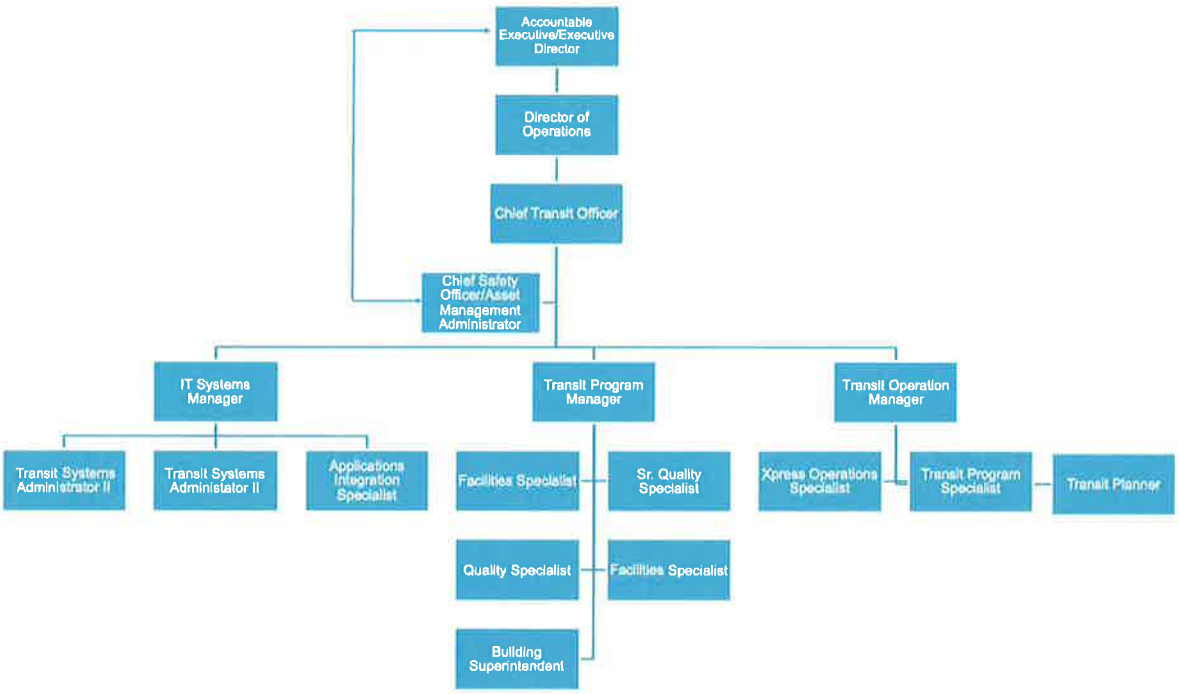
- Transportation Engineer (TE) - works in the SRTA Engineering department and provides support to ATL Xpress effort to maintain the Park and Ride lots at or above a 3.0 SGR score. He/she is responsible for cost estimates, on-site inspections, and monitoring of repairs at ATL Xpress Passenger Facilities (Park and Ride Lots).

- Chief Safety Officer (CSO) - is responsible for development, direction, implementation, and oversight of ATL's safety program. CSO is responsible for monitoring the service contractors as they manage system safety, occupational safety and health, accident and incident investigation, fire/life safety, and the continuous hazard management process in accordance with this policy.

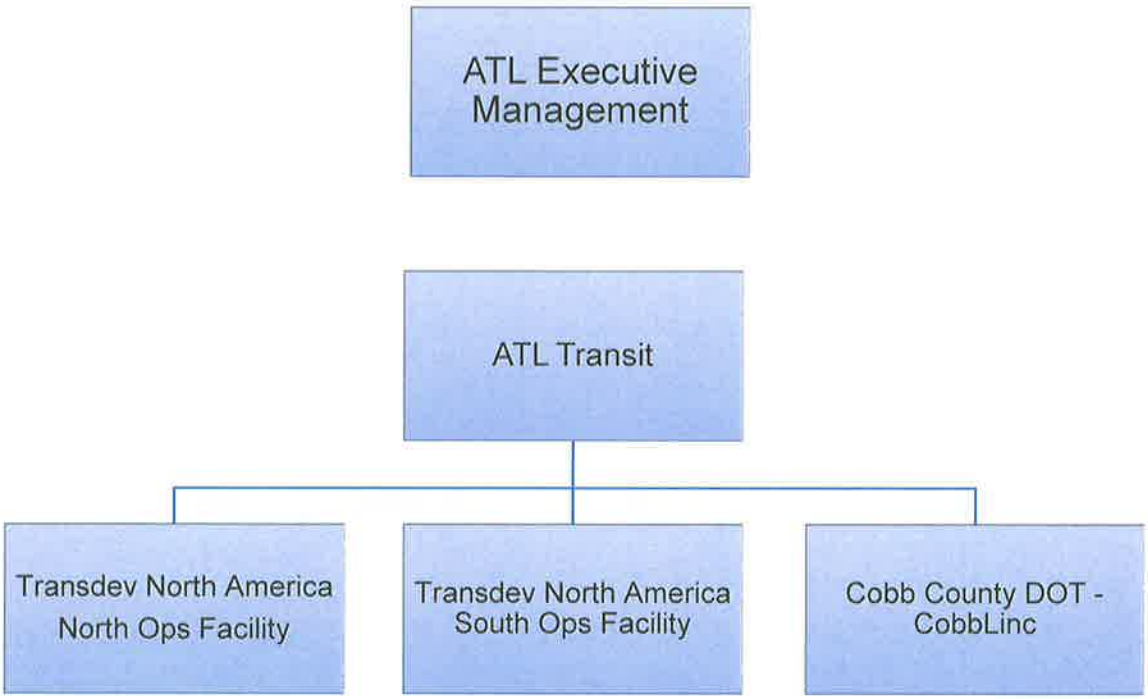
SRTA/ATL Org Chart
(June 8, 2022)



Transit Operations Chart



ATL and Service Contractors Chart



2.2 Acquisition and Renewal Strategy

The acquisition and renewal strategy are designed for the revenue fleet, non-revenue fleet, park and ride lots, shop equipment replacement, and South Ops facility.

2.2.1 Revenue Fleet

The primary revenue vehicle type used by ATL Xpress is the MCI commuter bus. Should ATL Xpress choose to adopt a different vehicle type, this policy will need to be revised to reflect the characteristics of the selected vehicle type.

Minimum Service Life: Given that Xpress's revenue vehicles are purchased using Federal funds, these vehicles are subject to FTA's 12-year/500k mile minimum service life requirement. Xpress's policy is to operate buses for at least 12-years or 500k miles. The current Useful Life Benchmark (ULB) is 16 years which was based on historical operational experience and improved reliability of the fleet. This allows staggered replacements for more consistent funding requests.

Engine and Transmission Service Life: Using historical maintenance records and improved reliability of components, the ULB for engines is 400,000 miles and 350,000 miles for transmissions. Attaining this benchmark is contingent upon completion of the recommended OEM inspection and maintenance actions.

Bus Replacement: The buses will be programmed for replacement based on maintenance cost, reliability, technology, and available funding. The actual replacement will occur after a minimum of 12-years or 500k miles in service and up to 16-years of service.

Engine and Transmission Replacement: Engines and transmissions will be considered for replacement or overhaul after meeting their ULB or due to total failure while in service.

2.2.2 Non-Revenue Fleet

The ATL Xpress uses multiple types and manufacturers of vehicles. The policy below is based on FTA and/or Georgia Department of Administrative Services (GADOAS) requirements and guidance.

Minimum Service Life: Dependent on funding source used to purchase. If FTA funded, FTA rules apply. If State funds, GADOAS rules apply. The ATL Xpress policy is to operate vehicles to the applicable minimum service life requirement.

Engine and Transmission Service Life: Historically, engines and transmissions on ATL Xpress non-revenue vehicles have lasted the life of the vehicle. The applicable service life of the vehicle will apply to engines and transmissions. Attaining this benchmark is contingent upon completion of the recommended OEM inspection and maintenance actions.

Vehicle Replacement: The vehicles will be programmed for replacement based on maintenance cost, reliability, technology, and available funding. The actual replacement will occur after the minimum service life has been met up to the applicable ULB.

Engine and Transmission Replacement: Engines and transmissions will be considered for replacement or overhaul after meeting their ULB or due to total failure while in service.

2.2.3 Park and Ride Lots

Minimum Service Life: The expected ULB of a typical Park and Ride Lot is 40 years. The Park and Ride Lot policy is driven by the replacement, rehabilitation, and maintenance requirements of the component assets (e.g., pavement, signage, and lighting). This service life is dependent on performing maintenance activities recommended by the component manufacturers and/or industry best practices.

Park and Ride Lot Components Service Life: The service life for most Park and Ride Lot components is dependent on use and climate conditions. Each component has its own minimum service life.

Replacement and/or Upgrade: For Park and Ride capital replacement or upgrade, a Capital Replacement/Upgrade plan based on objective asset life data and TAM SGR condition assessments is developed by the ATL Xpress and SRTA Engineering divisions. The plan will be executed, given funding, only after a thorough condition assessment of the asset

2.3 Overhaul Strategy

The rehabilitation program for Xpress's revenue fleet is designed to maximize fleet reliability, service quality, and minimize the corrective maintenance costs. The 2004 MCI fleet underwent a rebuild during 2017-2018 that extended the ULB to 2026. There are no plans to perform a similar rehab to the remaining fleet. There is consideration for a mid-life rehabilitation (engine and transmission replacement) at year 9 if funding is available, which will not extend the asset's life.

2.4 Maintenance Standards

ATL Xpress oversees two contractors that provide maintenance for the Xpress fleet. ATL staff monitors their performance through the quality assurance program described in the Fleet Maintenance Plan.

2.5 Unplanned Maintenance Needs

When a shortcoming or deficiency is noticed by customers, Inspectors, or other ATL personnel, the service contractors will be notified. Upon notification, the service contractors will determine the extent of the shortcoming or deficiency. A work order will be generated as needed to affect the repair. ATL staff performs inspections to verify the repair is complete and check the quality of the work.

2.6 Disposal Strategy

All Xpress assets are subject to the same disposal strategy regardless of asset type. A request for disposal form must be filled-out by the requesting department and approved by the Asset Management Administrator. The approval process includes verification that the asset has met useful life requirement or confirmation that required repairs are higher than asset's current value. The asset funding source may require specific surplus and disposal processes. All asset surplus and disposal will follow applicable FTA, State, and local requirements.

The reasons for disposal are listed below:

- Obsolete or no longer required for service operations
- FTA funded asset that has met or exceeded useful life
- Non-FTA funded asset that has met or exceeded useful life
- Fire – Damaged beyond repair

- Accident – Damaged beyond repair
- Other

The available disposal methods are listed below:

- Direct Negotiated Sale (DNS)
- Disposal Authorization (AD) – used when Xpress is responsible for disposal
- Electronics Disposal (ELC)
- Internet Sale (IS)
- Public Sale – Other (PSO)
- Transfer (T) – used when transferring to another FTA grantee or State agency
- Vendor Return (V) – used to return to a vendor in exchange for credit or other consideration
- Insurance Settlement – Fire
- Insurance Settlement - Accident
- Disabled – VW
- Other

2.7 Risk Management

The most significant safety risk to delivery of Xpress commuter service is the potential for accidents and/or incidents due to defective vehicles and equipment or conditions at the facilities. The authority utilizes several strategies to mitigate the probability of accidents and incidents such as: scheduled preventive maintenance inspections, audits of repair and performance records, required daily inspections of vehicles before service, continuous training and certifications requirements, and reporting of any hazardous condition to the ATL Chief Safety Officer.

3 Capital Asset Inventory

This section documents the full range of ATL's transit assets, including the types of assets used to provide and support commuter transit service, as well as the quantities, projected replacement values, and useful Life benchmark (ULB) of these assets. The Transit Asset Inventory included in the TAM Plan is the most comprehensive snapshot of ATL's assets at the end of FY2022. Recognizing the need for data collection improvements, ATL is in process of implementing a new Enterprise Asset Management System (EAMS) software with projected go-live by November 2022.

3.1 ATL's Asset Inventory

This section provides an overview of ATL's asset portfolio. While all assets used in the provision of transit service (whether SRTA-owned* or not) are to be included in the inventory, only those where ATL has direct capital responsibility are to be included in the condition assessment.

Xpress service delivery relies on three key asset groups: revenue vehicles, facilities, and equipment (including non-revenue vehicles). The transit asset inventory is estimated to be valued at $186,735,420 (total replacement cost in 2022 dollars), including an estimated soft cost percentage. Soft costs are 22.5 percent for facilities and 10 percent for vehicles and equipment. A high-level summary of ATL's transit assets and additional details are show in Table 3-1.

**Note: All assets are owned by SRTA. ATL leases assets from SRTA when there is federal participation. This is in accordance with state requirement.*

Table 3-1 Asset Inventory Summary

Asset Category/Class	Total Number	Average Age	Average LTD Mileage	Replacement Cost/Value
Revenue Vehicles				
BR – Over-the-road Bus	147	4.29	233,816	$109,542,797
Equipment				
Non-Revenue/Service Vehicles	8	10.38	58,193	$526,412
Other Rubber Tired Vehicles	2	7.08	48,122	n/a (service contractor will provide)
Facilities				
Administration (Owned-SRTA)	1	5.0	n/a	$3,367,652
Maintenance (Owned-SRTA)	1	5.0	n/a	$16,447,593
Passenger (Owned-SRTA)	8	13.25	n/a	$26,794,653
Passenger (Custodial Rights-SRTA)	2	16.50	n/a	$6,698,663

Xpress currently operates 147 revenue vehicles, which represent 55 percent of the total asset value by replacement cost. Revenue vehicles are supported by a fleet of 10 non-revenue vehicles, including 8 automobiles, small trucks, and van, plus 2 service trucks. Non-revenue vehicles are used to support service delivery in activities such as field supervision, fleet and facility maintenance and passenger pickups due to bus breakdowns.

Due to the characteristics of Xpress service, Park and Ride Lots are critical assets for service delivery. ATL utilizes a total of 27 lots located along the five primary highway corridors that feed service into downtown and midtown Atlanta. Lot sizes range from 100 to over 900 parking spaces, with an average of 425 parking spaces per lot. ATL leases from SRTA 10 of the lots, another 9 are leased from private owners, and the remaining 8 are used through IGAs with other state/local government entities. ATL has direct capital responsibility for the lots owned by SRTA and limited contractual responsibility for the lots leased from private owners. ATL has no direct financial responsibility for the 7 lots under IGAs.

In addition, ATL uses three facilities to operate Xpress (see Table 3-2). Out of these three, the South Ops facility is the largest and newest, and is owned by SRTA and leased to ATL. This 38,000-square-foot facility is made up of two buildings (maintenance and administration), fueling station, and a bus wash. This facility will be upgraded to operate 10 electric buses in 2023.

Table 3-2 ATL Facilities, Location, and Service

Asset Name	Owner	Number of Buses	Number of Routes	Location	Service Contractor
South Ops	SRTA	76	14	5250 Frontage Road, Forest Park, GA	Transdev
North Ops	Gwinnett County	56	11	2880 Remington Park Ct. Norcross, GA	Transdev
CobbLinc	Cobb County	15	2	463 Commerce Park Dr, Marietta, GA	Cobb County/First Transit

In addition to these assets, ATL leases from SRTA a range of shop equipment that supports both maintenance and operations activities. This includes bus lifts, bus washes, fuel islands, and others with a total value of $1.66 million. ATL leases and maintains about $21.69 million in technology assets such as fare collection systems, on-board camera system, and computers.

3.1.1 Revenue Vehicle Inventory

Table 3-3 Revenue Vehicle Detailed Inventory

Asset Types	Count	Average Age - Years	Projected Replacement	% Of Total Asset Class	Notes
REVENUE VEHICLES					
2004 MCI D4500	47	4.55	2023/2026	31.98	Rehab in 2017/18
2011 MCI D4500	21	11.0	2025	14.28	
2019 MCI D4500	1	3.14	2031	0.68	
2020 MCI D4500	76	2.40	2031/2032/2033	51.7	
2021 MCI D4500	1	0.65	2033	0.68	
2020 MCI D45 CRTLE	1	2.76	2032	0.68	
Subtotal	**147**			**100.00**	

3.1.2 Equipment Inventory

Table 3-4 Equipment Detailed Inventory

Asset Types	Count	Average Age - Years (FY22)	Projected Replacement	% Of Total Asset Class	Notes
EQUIPMENT					
Non-Revenue/Service Vehicles	8	10.38	2025 and 2026	80	Only 3 vehicles to be replaced by ATL Xpress
Other Rubber Tire Vehicles	2	7.08	n/a	20	To be provided by service contractor
Subtotal	**10**	**7.64**		**100.00**	

3.1.3 Facilities Inventory

Table 3-5 Facilities Detailed Inventory

Asset Types	Count	Average Age	Projected Replacement)	% Of Total Asset Class	Notes
FACILITIES					
Administration/Maintenance	3				
South Ops (Owned)	1	5.0	2057	25.5	
North Ops	1	N/A	N/A	N/A	Not owned by ATL/SRTA
CobbLinc	1	N/A	N/A	N/A	Not owned by ATL/SRTA
Passenger Facilities	27				
Owned-SRTA	8	13.25	2034 through 2041	72.7	
Custodial Rights-SRTA	2	16.50	2034 through 2041	1.8	
Leased	9	N/A	N/A	N/A	Not owned by ATL/SRTA
Other	8	N/A	N/A	N/A	Not owned by ATL/SRTA
Subtotal				**100.00**	

4 Asset Condition Assessment and SGR Ratings, Performance Targets and Measures

The TAM Rule requires that transit agencies perform condition assessments on all assets for which it has direct financial responsibility. The assessments must be performed prior to the expiration of the current TAM plan. For this plan update, ATL performed condition assessment on a sampling of the bus fleet, the South Ops facility, and the owned (12) and private leased (9) passenger facilities.

The Asset Condition criterion reflects ATL's commitment to maintaining assets in a State of Good Repair. Asset condition scores were assessed using the FTA's 5-point condition rating system (where higher condition ratings reflect newer assets in good to excellent overall condition while lower values reflect older assets in marginal or worn condition).

4.1 Asset Condition Assessment and SGR Ratings

As part of the development of this TAM Plan, ATL employed third party inspectors to conduct the condition assessment inspections of rolling stock, non-revenue support vehicles, facilities, and park and ride lots as listed below.

- Rolling Stock
  - Onsite visual physical condition assessments
  - Inspected systems and subsystems
  - Reviewed PMI and work order records
- Non-Revenue Support Vehicles
  - Onsite visual physical condition assessment
  - Inspected systems and subsystems
  - Reviewed PMI and work order records
- Facilities
  - Onsite visual physical condition assessment
  - Daytime and nighttime visits
  - Review of completed repairs since last inspection in 2017
  - Projected cost of identified repairs needed
- Park and Ride Lots
  - Onsite visual physical condition assessment
  - Daytime and nighttime visits
  - Review of completed repairs since last inspection in 2017
  - Projected cost of identified repairs needed

- Rating runs from excellent (5), through good (4), adequate (3), marginal (2) and poor (1) (see Table 3-4) to provide ease of understanding and alignment.

4.1.1 Condition SGR Score as Defined in TERM

The SGR TERM Rating Score is presented below in Table 4-1.

Table 4-1 TERM Rating Score

TERM Rating	Condition	Description
Excellent	4.8-5.0	No visible defects, near-new condition
Good	4.0-4.7	Some slightly defective or deteriorated components
Adequate	3.0-3.9	Moderately defective or deteriorated components
Marginal	2.0-2.9	Defective or deteriorated components in need of replacement
Poor	1.0-1.9	Seriously damaged components in need of immediate repair

4.1.2 Condition Assessment Results

The results of ATL's condition assessment inspections conducted in 2021 are presented below in Table 4-2. The average composite score for each class of assets is presented based on the TERM Lite rating criteria.

This analysis suggests that the majority of ATL's assets are in adequate condition or better (implying significant remaining useful life for these assets).

Table 4-2 Asset Condition Assessment Summary

Asset Category/Class	Total Number	Average SGR Score	Condition Assessment Completed	Replacement Cost/Value
Revenue Vehicles				
BR – Over-the-road Bus	40	4.49	Representative Sampling of fleet	$109,542,797
Equipment				
Non-Revenue/Service Vehicles	9	4.51	All	$526,412
Other Rubber Tired Vehicles	2	3.95	All	n/a (service contractor will provide)
Facilities				
Administration (Owned-SRTA)	1	3.34	All	$3,367,652
Maintenance (Owned-SRTA)	1	3.34	All	$16,447,593
Passenger (Owned-SRTA)	8	3.52	All	$26,794,653
Passenger (Custodial Rights-SRTA)	2	3.06	All	$6,698,663

Note: The non-revenue fleet size was 9 at tine of the condition assessment. As of June 30, 2022, it was 8 as shown on inventory tables 3.1, 3.1.2, and 3.4. One vehicle was in an accident and is in process of being replaced.

Table 4-3 Average TERM Condition by Asset Class

Asset Category	Asset Class	Asset Type	Average TERM Condition Score
Revenue Vehicles	BR – Over-the-road Bus	2004 MCI D4500	4.39
		2011 MCI D4500	4.41
		2019 MCI D4500	4.88
		2020 MCI D4500	4.60
		2021 MCI D4500	5.0
Equipment	Non-Revenue/Service Vehicles	Automobiles	4.51
	Other Rubber Tired Vehicles	Trucks	3.95
Facilities	Administration	Combined administrative and maintenance Facility	3.34
	Passenger (Owned-SRTA)	Park and Ride Lot	3.52
	Passenger (Custodial Rights-SRTA)	Park and Ride Lot	3.06

4.2 State of Good Repair (SGR) Performance Targets and Measures

The TAM Rule requires that transit agencies establish performance measures and targets for each asset class. As a bus-only agency, ATL must report measures for asset categories presented in Table 3-1. For each performance measure, targets must be set annually, and should be supported by the most recent condition data and reasonable financial projections.

Each year, ATL's Asset Management Administrator coordinates the effort to set targets for the SGR measures for the following fiscal year. The targets are synchronized with the Strategic Plan approved by the ATL Executive Director. The goal is to set realistic targets based on:

- Historic performance trends.
- Known capital or operating plans for the next fiscal year; and
- Identified risks to achieving the targets and mitigation plans.

The TAM Final Rule established four performance measures as a minimum standard for transit operators. The infrastructure performance measure applies only to rail operators. The performance measures applicable to ATL are listed and defined on table 4-4.

Table 4-4 FTA TAM Performance Measures

Performance Measures	Definition
Rolling Stock (Revenue Vehicles)	The percentage of revenue vehicles (by asset class) that have met or exceeded the Useful Life Benchmark (ULB)
Equipment (Non-Revenue Vehicles)	The percentage of non-revenue service vehicles (by asset class) that have met or exceeded the ULB
Facilities	The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale. Condition assessments must be no more than four years old.

Based on the most recently measured performance of ATL's transit assets, the following targets have been selected in alignment with ATL/SRTA's Strategic Plan state of good repair goals.

Table 4-5 ATL Performance Targets 2023 to 2027

Asset Category	Asset Class	2023 Target	2024 Target	2025 Target	2026 Target	2027 Target
Revenue Vehicles	BR-Over-the-road Bus	0	0	0	0	0
Equipment	Automobiles	0	0	0	0	0
	Trucks and Other Rubber Tired Vehicles	0	0	0	0	0
Facilities	Administrative and Maintenance	0	0	0	0	0
	Passenger and Parking	0	0	0	0	0

5 Prioritization, Reinvestment and Decision Support Tools

This section reviews ATL's current capital program prioritization process and summarizes current SGR reinvestment requirements. ATL is working to implement a new EAMS software to provide comprehensive asset inventory as identified in Chapter 3. The condition assessment process as defined in Chapter 4 is continually reviewed for improvement and provides the groundwork for the prioritization process described in this section. ATL has established a capital program informed by data-driven needs and funding availability. Using this approach ATL was able to substantiate and secure funding to complete multiple repairs on park and ride lots, apply and obtain funding for electric buses, and built and renovate transit facilities over the last 4-years. New funding supported the replacement of rolling stock moving ATL towards the goal of improving the SGR for the fleet.

Over the last 4-years, the prioritization process has been more data-driven relying on condition assessments, on-site confirmation of current status, and maximizing available funding. Additional review of priorities was conducted to make sure they were in close alignment with ATL's strategic objectives.

Multiple staff members of ATL and SRTA are involved and guide ATL's approach to investment prioritization to provide cross-functional input and include members from: ATL Xpress operations, SRTA planning, SRTA engineering, SRTA budget, SRTA project management, and ATL asset management. The group meets regularly to review ATL's investment needs and to continue to guide improvements in ATL's capital planning and programming process. The new EAMS will be a tool to improve many of the current processes and provide better condition assessment data, which will allow staff to more accurately assess risks and near-term needs.

5.1 Prioritization Process

ATL has developed an investment prioritization process that involves the use of a risk scoring process with a multi-criteria decision analysis process. The risk scoring process assigns a "risk score" to asset components that are observed to be below their minimum condition standard based on asset condition assessments.

Risk scores are calculated mathematically on a 5 to 1 scale based on:

- → Observed asset component condition
- → Consequences to Xpress (reliability and safety) should that asset component fail as a result of being in a deteriorated condition

The risk score consideration reflects ATL's commitment to building and maintaining a premier safety culture and system. ATL used the Department of Defense Standard Practice System Safety (MIL-STD- 882E) standard as a guideline to score the Safety Risk, as this is the standard required in ATL's System Safety Program Plan (SSPP). This standard guides a risk-based assessment that combines the severity and probability of potential hazards or incidents, to generate a combined safety or security score for each facility and park and ride lot asset in ATL's inventory.

For purposes of prioritization, assets with high-risk scores (at or near 5.0) receive the highest priority for rehabilitation or replacement. Asset components with lower risk scores have a lower prioritization ranking

with ranking based on the assigned score. By assessing and ranking risk at the component level, ATL can identify investment projects that mitigate potential risks.

The multi-criteria decision process evaluates candidate investment projects based on other factors of importance to the organization. For example, projects can be defined based on asset condition, operational efficiency, environmental needs, non-compliance with laws such as ADA, or technological modernization.

Once projects are identified, they are scored and assigned a priority rating based on the factors listed above.

For purposes of investment prioritization, condition ratings were turned "upside down" such that assets in good condition receive low reinvestment priority scores whereas assets with low condition ratings received higher prioritization scores. Asset condition inspection are performed every 4-years for facilities and park and ride lots, and over the time horizon of the TAMP for vehicles using representative samples for each vehicle model year.

This means that as assets age their condition tends to deteriorate and their priority for reinvestment increases. This dynamic scoring of condition follows the FTA's development of decay curves for the purposes of projecting future asset conditions.

5.2 Reinvestment Needs

This section provides a description of ATL's reinvestment needs from CY2022 to 2026. These figures reflect any future planned replacements. It also includes an analysis of ATL's unconstrained and constrained reinvestment needs as well as related analysis of ATL's current and expected future SGR backlog and asset conditions.

The long-term reinvestment needs analysis presented here were developed using the TERM Lite model and inventory data.

Nearly all these transit assets will need to be replaced as they reach the end of their useful life. Some of these assets, such as bus fleet, may require overhauls or annual capital maintenance to renew asset performance which can add years to the vehicle's life.

Table 5-1 ATL Fleet Replacement Projections 2022 to 2026

Asset Types	Count 2022	Projected Count 2023	Projected Count 2024	Projected Count 2025	Projected Count 2026
REVENUE VEHICLES					
2004 MCI D4500	47	37	37	0	0
2011 MCI D4500	21	21	21	21	0
2019 MCI D4500	1	1	1	1	1
2020 MCI D4500	76	76	76	76	76
2021 MCI D4500	1	5	5	5	5
2020 MCI D45 CRT LE	1	1	1	1	1
2021 MCI D45 CRT LE	0	14	14	14	14
2023 MCI D45 CRT LE Charge	0	10	10	10	10

2024 MCI				37	37
2025 MCI					21
Total	**147**	**165**	**165**	**165**	**165**

New Need

1. Procurement of 10 electric buses to reduce emissions and replace 2004 fleet (partial).
2. Procurement of buses to replace remainder of the 2004 Fleet (37) to improve service reliability.
3. Procurement of buses to replace the 2011 fleet (21) to improve service reliability.

Table 5-2 ATL Fleet Required and Procurements – Projected Costs 2022 to 2026

Year	Required Fleet	Additional Vehicles	Replacement Vehicles	Projected Cost	Comments
REVENUE VEHICLES					
2022	165	0	19	$12,350,000	Replace 2009 fleet
2023	165	0	10	$8,000,000	Partial replacement of 2004 fleet (10) with Electric Buses
2024	165	0	0	$0	
2025	165	0	37	$25,900,000	Replacement of 2004 fleet (37)
2026	165	0	21	$14,700,000	Replace 2011 fleet
Total		**0**	**87**	**$53,750,000**	

5.2.1 SGR Backlog

The SGR backlog is an estimate of the level of investment required to replace all assets that either exceed their expected useful life or which require rehabilitation or replacement based on conditions assessments. As of 2022, ATL's SGR backlog is estimated to be $78.69 million (Using FTA TERM Lite modeling to replace all assets that currently exceed their expected useful life, including inflation and soft cost assumptions). The largest proportion of deferred capital needs is revenue fleet replacement. Priority items include the continuing replacement of older buses and introduction of electric buses.

5.2.2 Unconstrained Needs

This analysis assumes that ATL has unlimited capacity to address all capital reinvestment needs. Unconstrained needs represent the total level of investment required both to fully eliminate ATL's existing SGR backlog and then to maintain all existing ATL assets in a continual state of good repair thereafter.

While unrealizable in practice (due to funding and physical limitations), unconstrained analysis provides a valuable measure of ATL's total reinvestment needs.
The total unconstrained SGR needs is estimated at $172.3 million for the 20-year period of 2023 to 2043. This includes normal replacement before assets exceed their useful life, rehabilitation, and annual capital maintenance once the deferred capital needs are addressed.

5.2.3 Constrained Needs

The constrained analysis is a more realistic evaluation acknowledging that there are external factors that influence ATL's development of a capital budget – including but not limited to providing project and contract commitments, funding capacity, and scheduling/scoping constraints based on procurement and contracting mechanisms.

5.2.4 Review and Implementation Process

To produce a realistic capital program that is aligned with the agency's goals and priorities, ATL began utilizing a review and implementation process that includes planning, budget, engineering, and operations staff to process capital project submissions. In brief, the process provides ATL and SRTA staff the opportunity to provide input and explain the needs. The process includes seven steps:

- *Project Review (Applies to all projects)*
  1. Project Initiation – to identify the need and cost of the project
  2. Evaluation and Prioritization – to evaluate the project and assign it a priority level
  3. Project Approval – approve and commit to execution of project, funding identified

- *Project Implementation (Applies only to approved projects that have been funded)*
  4. Project Start – issue bid request for scope of work, select bidder
  5. Award Contract for Project
  6. Monitor Progress of Project to Completion
  7. Project Close-out – document new or replaced asset in ATL's asset inventory, verify compliance with scope of work, and close punch list

Using this process, ATL has selected the projects listed below to implement over the time horizon of this TAMP.

Projects are listed with indication of whether they are:

→ Compliance: with existing law such as ADA and other FTA requirements
→ State of Good Repair (SGR) projects: from condition assessment inspection and SGR scores
→ Modernization: general upgrades to ATL assets that improve service quality and performance
→ Expansion: to increase ATL's capacity for delivering transit service
→ Technology: introduction of new technology such as electric vehicles
→ Safety and Security

5.3 Capital Projects

Table 5-3 ATL List of Major Projects 2022 to 2026

Project	Type	Rank	Planned Implementation Year	Target Completion Year	Status	Notes
Compliance Projects						
ADA Repairs – State Owned Lots	Compliance	1	2023	2024	Pending	Getting Quotes
SGR Projects						
Replace 2009 MCI Fleet (20)	SGR	1	2022	2023	In Process	15 MCI D4500 and 5 MCI D45 CRTLE
Pavement Repairs	SGR	2	2023	2025	Pending	Multiple Park and Ride Lots
South Ops Pavement Sealing/Restriping	SGR	3	2023	2024	Pending	
Snellville Park and Ride Lot	SGR	4	2023	2024	Pending	
Replace 2004 MCI Fleet (37)	SGR	5	2024	2025	Pending	
Replace 2013 Ford F150 (927-2002)	SGR	6	2024	2025	Pending	
Hiram Park and Ride Lot	SGR	7	2024	2025	Pending	
Replace 2011 MCI Fleet (21)	SGR	8	2025	2026	Pending	
Technology Projects						
EAMS Software Implementation	Technology	1	2021	2022	In Process	Go Live November 2022
Design and Build Electric Bus Fleet Infrastructure	Technology	2	2022	2023	In Process	South Ops: 10 Chargers and Dispensers in Yard and one Mobile Charger in Maintenance Facility

Electric Bus Fleet Introduction (10) MCI D45 CRT LE	Technology	3	2022	2023	In Process	Replacing 10 of the 2004 MCI Diesel Fleet
Safety and Security Projects						
South Ops Employee Parking Fencing	Safety and Security	1	2023	2024	Pending	
South Ops Employee Parking Gate	Safety and Security	2	2023	2024	Pending	
Modernization Projects						
South Ops Equipment Replacement	Modernization	1	2023	2024	Pending	
South Ops Dispatch Equipment Room Ventilated Door	Modernization	2	2023	2024	Pending	
South Ops Equipment Room Pull Down Stairway	Modernization	3	2023	2024	Pending	
Expansion Projects						
Sugarloaf Park and Ride Lot	Expansion	1	2022	2023	In Construction	New Park and Ride Lot

6 Implementation, Annual Activities and Resources

6.1 Implementation Strategy

Key annual activities and related actions in support of the TAM Plan and asset lifecycle management are detailed below. These activities align with the goals and objectives of providing a consistent approach to data collection and analysis as a fundamental element of ATL's Xpress TAM Plan update and implementation approach.

Table 6-1 List of Key Annual Activities

Activity	Action
Asset Inventory	Review and update inventory as needed. Confirm accuracy of additions and disposals.
Condition Assessment	Schedule and perform vehicle inspections on a sample of fleet. Plan and schedule facility inspections on the third year of the plan.
Investment Prioritization	Continue to adjust and improve the capital planning process based on needs and budget.
List of Investment	Identify all the planned investment projects and evaluate for implementation. Adjust priorities as required.
Asset Management Policy	Review policy to ensure its accurate and adjusted to current operational conditions.
Implementation	Identify steps required to implement plan and target dates.
Resources	Review list of resources and update if needed. Confirm their participation in TAM.
Evaluation	Review the targets and goals in the plan and evaluate the Agency's performance in reaching them during the previous year.

6.2 Identification of Resources

6.2.1 Staff Resources

It is anticipated the following staff resources will be required for TAM activities for the duration of the plan horizon:

- Accountable Executive
- Asset Management Administrator (full time)
- TAM Activities Support Group (as needed) – Group comprised of staff from:
    - ATL Xpress Operations
    - SRTA Engineering
    - SRTA Project Management
    - SRTA Budget and Finance
    - SRTA Planning

6.2.2 Technology Resources

The technology resources available to ATL for TAM activities are listed on table 6-2.

Table 6-2 List of Technology Resources

Technology	Description	Owner
PeopleSoft	Enterprise Resource Planning System – provides tracking of Financials, Capital Management	SRTA Finance
Clever Devices - CAD/AVL	The CAD/AVL system connects our vehicles seamlessly with our dispatch offices and automatically collects vital data used by dispatchers such as bus GPS locations, schedule adherence status, breakdowns and emergencies	ATL Xpress ITS
Hastus	Scheduling & Dispatch – provides improved planning, scheduling operations	ATL Xpress Operations
FuelMaster	Fuel Management – monitoring of fuel usage	ATL Xpress Operations
DTS VUEWorks - EAMS	Enterprise Asset Management System for Fleet and Facilities asset management. Software solution that improves planning, scheduling, routing and completion of work orders based on priority, resources and assets	ATL Asset Management (Projected Go Live 11/22)

7 Monitoring, Evaluation and Continuous Improvement

7.1 Monitoring

ATL aims to comply fully with MAP-21 requirements for transit asset management and beyond. It will review the TAMP every six-months to verify compliance with all applicable FTA TAM regulations and Guidance.

The TAMP was developed in alignment with ATL/SRTA's overall Strategic Goals. Updates to the plan will be made as needed to maintain this link.

A focus on accurate and actionable information is a priority particularly the inventory of all ATL assets, and continuously assessing asset condition. This information will support planning and provide a clearer path to prioritizing projects based on condition, risks, and best use of limited resources.

Performance Monitoring

The agency's TAM Policy and this TAM Plan set principles, strategies, and performance measures for continually improving how ATL manages its assets. To successfully implement this TAM Plan and advance the agency's TAM maturity, an annual review of progress and performance measures will be conducted and will be used to revise these documents as needed and to develop new projects to further ATL's progress towards industry best practices. ATL's annual approach to reviewing and updating TAM documents and performance measures will follow the continual improvement approach of:

1. Plan – plan for improvement activities and set performance targets
2. Do – execute the annual activities
3. Check – review the outcome of the TAM activities to determine action
4. Act – track improvements and document

Revisions to this TAM Plan will be reviewed by ATL's Asset Management Administrator and approved by the Accountable Executive. This TAM Plan will be reviewed and revised at least every four years, as required by the FTA. Any revisions will require input from various internal and external stakeholders. Internal input will be sought out and reviewed by the Asset Management Administrator, and external stakeholder involvement will be sought out and coordinated. ATL will move towards better asset performance, risk reduction, and agency cost savings with each revision of the TAM Plan.

7.2 Evaluation Plan

Communications and Change Management

Successful asset management implementation requires good communication, to allow people to understand changing processes, and to bridge the many departments and offices that exist in the organization. This includes ongoing dialogue, progress updates, and change management.

A common approach for change management is represented by the ADKAR acronym, which is a useful aid for understanding and promoting organizational change. The acronym represents:

A	Awareness of the need for change
D	Desire to support and participate in the change

K	Knowledge of how to change
A	Ability to implement change
R	Reinforcement to sustain the change

This TAM Plan summarize the ongoing communication among the various divisions of ATL and SRTA. This will be an essential part of how the successes and challenges of the plan will be monitored and evaluated going forward.

Stakeholders

The ability to efficiently manage ATL's transit assets depends on not only ATL employees, but also on a variety of external stakeholders, partner jurisdictions, elected officials, customers/community, regulators, and contractors who all have their own expectations from the system.

- Customers/community: ATL's reason to exist are the customers who use its services. ATL's customers depend on transit to access employment, education, healthcare, shopping, and entertainment. Additionally, ATL's customers need to be able to trust that the equipment and operators will get them to their destinations safely. When a customer is delayed repeatedly or injured due to infrastructure or equipment failure, ATL risks losing its most important stakeholder.
- Partner Jurisdictions: ATL depends to a large degree on its federal, state, and local partners for funding. As such, it must collaborate closely with these partner jurisdictions, especially with respect to communicating current and future reinvestment needs.
- Planning and Transit Partners: The Atlanta Regional Commission (ARC) is the metropolitan planning organization for transportation. The ATL coordinates with ARC in the use of federal funds on transit projects and shares annually the state of good repair performance measures with ARC. The Metropolitan Atlanta Rapid Transit Authority (MARTA), Gwinnett County Transit (GCT) and Cobb County (CobbLinc) are local operators in the region that ATL coordinates transit service with and provides connectivity to all partner agencies
- Regulators: Through rulemaking and oversight, the FTA, Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), State of Georgia, and other agencies all directly influence how ATL's transit assets are managed.
- Vendors: The performance and pricing of service providers, contractors, consultants, material suppliers, and other vendors directly affect ATL's ability to deliver projects on-time and on-budget.

Future TAM Plan Revisions

ATL operates in a challenging environment in terms of physical conditions, service requirements and funding. As such, ATL will make appropriate adjustments to the projects and expectations throughout the life of the Plan. In the event of unexpected circumstances that significantly affect either asset conditions (e.g., catastrophic weather damage to multiple facilities) or the agency's capacity to implement its plans (e.g., dramatic funding reductions/shortfalls), ATL may need to amend the plan prior to the end of its four-year life. The Asset Management Administrator will revise the Plan and present it to the Chief Transit Officer for review and concurrence with final determination and approval made by the Accountable Executive.

7.3 Continuous Improvement

The organizational structure of ATL Xpress was provided in section 2.1. The Transit Operations Chart details the reporting relationship for Xpress staff. The Chief Transit Officer sets policy and approves procedural changes to the Fleet and Facility Maintenance Plans. All requests for policy or procedural changes must be routed and approved by the Asset Management Administrator prior to routing to the Chief Transit Officer. The Asset Management Administrator reports directly to the Chief Transit Officer. The Senior Quality Specialist and the Fleet Specialist work together as a team to ensure safety and best practices are associated with all maintenance operations. Specifically, this includes evaluating the effectiveness of the preventive maintenance program and monitoring compliance with all FTA and ADA rules and regulations

The Asset Management Administrator is also the ATL's Chief Safety Officer (CSO). The nexus between asset condition and safety and their management system frameworks made this a sensible structure.

To ensure best practices and improve operations, the Fleet and Facilities Maintenance Plans are reviewed annually and updated as needed.

Another improvement completed since the last TAM plan was the development of the Design Manual for Xpress Stations and Park and Ride Facilities. The manual provides the framework for design criteria and requirements for ATL Xpress owned facilities to be customer oriented, safe, and secure.

As part of the continuous effort to improve asset management functionalities, ATL Xpress has been working towards the implementation of a new Enterprise Asset Management System (EAMS) and the target for system Go Live is November 2022.

Inspection checklists are included in the Fleet and Facility Maintenance plans and are being configured in the new EAMS software to be available for technicians when a PMI work order is created.

Appendix A - List of Acronyms Used in TAM Plan

Acronym	Word or Phrase
AE	Accountable Executive
ADA	Americans with Disabilities Act of 1990
ARC	Atlanta Regional Commission
BR	Vehicle type: Over-the-Road Buses
CAD/AVL	Computer Aided Dispatch (CAD) and Automated Vehicle Location (AVL)
CBM	Condition Based Maintenance
CB	Mode: Commuter Bus
CEO	Chief Executive Officer
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
DOT	Department of Transportation
EAMS	Enterprise Asset Management System
FMP	Facilities Maintenance Plan
FMP	Fleet Maintenance Plan
FTA	Federal Transit Administration
MDBF	Mean Distance Between Failures
MPO	Metropolitan Planning Organization
NTD	National Transit Database
OEM	Original Equipment Manufacturer
OSHA	Occupational Safety and Health Administration
PDM	Predictive Maintenance
PM	Preventive Maintenance
PT	Purchased Transportation
SGR	State of Good Repair
SOP	Standard Operating Procedure
SRTA	State Road and Tollway Authority
TAM	Transit Asset Management
TAMP	Transit Asset Management Plan
TERM	Transit Economic Requirement Model
UL	Useful Life
ULB	Useful Life Benchmark
UPT	Unlinked Passenger Trips
VRM	Vehicle Revenue Miles

Appendix B - Definitions of Terms Used in TAM Plan

Term	Definition
Accountable Executive	A single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's public transportation agency safety plan, in accordance with 49 U.S.C. 5329(d), and the agency's transit asset management plan in accordance with 49 U.S.C. 5326.
Active Vehicles	The vehicles available to operate in revenue service at the end of the fiscal year, including: • Spares • Vehicles temporarily out of service for routine maintenance and minor repairs • Operational vehicles
Active vehicles in Fleet	The vehicles in a particular fleet at year-end that are available to operate in revenue service, including: • Spares • Vehicles temporarily out of service for routine maintenance and minor repairs
ADA Accessible Stations	Public transportation passenger facilities which, in compliance with ADA requirements, provide ready access and do not have physical barriers that prohibit and/or restrict access by individuals with disabilities, including individuals who use wheelchairs.
ADA Accessible Vehicles	Public transportation revenue vehicles which, in compliance with ADA requirements, do not restrict access, are usable, and provide allocated space and/or priority seating for individuals who use wheelchairs, and which are accessible using lifts or ramps.
Amendments	A provider may update its TAM plan at any time during the TAM plan horizon period. A provider should amend its TAM plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that the provider did not reasonably anticipate during the development of the TAM plan.
Asset Category	A grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities.
Asset Class	A subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category.

Asset Management	A strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based on information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair during the lifecycle of the assets at minimum practical cost.
Backlog	State of Good Repair backlog is representative of the reinvestment cost to replace any transit assets whose condition is below the midpoint on TERM's 1 (poor) to 5 (excellent) scale, or 2.5
Capital Asset	A unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.
Capital Need	Represents a capital request to rehabilitate, replace, or add a group of assets to the system. Each capital need consists of a group of similar or interdependent assets.
Capital Responsibility	Transit agencies are required to report condition assessments for assets in which they own, jointly own with another entity, or for assets that they are responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the cost of those activities are itemized as a capital line item in the agency's budget. Agencies are required to begin reporting on capital assets that they have direct capital responsibility for in the fiscal year in which the agency begins using the asset for public transportation service.
Commuter Bus (CB)	Local fixed-route bus transportation primarily connecting outlying areas with a central city. Characterized by a motorcoach (aka over-the-road bus), multiple trip tickets, multiple stops in outlying areas, limited stops in the central city, and at least five miles of closed-door service.
Condition Assessment	A condition assessment of those inventoried assets for which a provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization. Conditions levels include Excellent (5), Good (4), Adequate (3), Marginal (2), and Poor (1), with assets being considered in good repair with a score of 3 or greater.
Contracted Services	A contract for services is a formal, legally binding agreement between ATL and a private company to provide service delivery.
Contractor (Transit Services)	An individual or company compensated by the transit agency for directly operated (DO) services,
Decay Curves	Graphic representation of the relationship between an asset's condition and its age and type. TERM Lite's asset decay curves predict/forecast condition based on age and type.

Decision Support Tool	An analytic process or methodology: (1) To help prioritize projects to improve and maintain the state of good repair of capital assets within a public transportation system, based on available condition data and objective criteria; or (2) To assess financial needs for asset investments over time.
Deferred Capital Needs	Scheduled capital investment postponed or put off until a later time, equivalent to FTA's definition of backlog.
Direct Recipient	An entity that receives Federal financial assistance directly from the Federal Transit Administration.
Emergency Contingency Vehicles	Revenue vehicles placed in an inactive contingency fleet for energy or other local emergencies after the revenue vehicles have reached the end of their normal minimum useful life. The vehicles must be properly stored and maintained, and FTA must approve the Emergency Contingency Plan. Substantial changes to the plan (10% change in fleet) require re-approval by FTA.
Equipment	An article of nonexpendable, tangible property having a useful life of at least one year.
Expansion (fleet)	The acquisition of revenue vehicles for expansion of transit service.
Facility	A building or structure that is used in providing public transportation.
Federal Transit Administration (FTA)	An agency within the U.S. Department of Transportation.
Fixing America's Surface Transportation (FAST) Act	A transportation reauthorization bill signed into law on December 4, 2015. It is a policy and programmatic framework for surface transportation programs.
Inactive Vehicles	The vehicles: • In storage • Emergency contingency vehicles • Vehicles pulled from the active fleet but awaiting sale • Vehicles out of service for an extended period for major repairs.
Hazard Risk	The composite of predicted severity and likelihood of the potential effect of a hazard.
Hazard Risk Mitigation	A method or methods to eliminate or reduce the effects of hazards.
Horizon Period	A TAM plan must cover a horizon period of at least four (4) years. The transit provider will evaluate the performance of its TAM plan during this period.
Investment Prioritization	A transit provider's ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a transit provider reasonably anticipates will be available over the TAM plan horizon period.

Inventory	An inventory of the number and type of capital assets. The inventory must include all capital assets that a provider owns, except equipment with an acquisition value under $50,000 that is not a service vehicle. An inventory also must include third-party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects.
Lifecycle	The cost of managing an asset over its whole life.
Moving Ahead for Progress in the 21st Century (MAP-21)	A transportation reauthorization bill signed into law on July 6, 2012. It is a policy and programmatic framework for surface transportation programs.
National Transit Database (NTD)	A reporting system that collects public transportation financial and operating information.
Operator of Public Transportation System	A provider of public transportation as defined under 49 U.S.C. 5302(14).
Over-the-Road Bus	A bus characterized by an elevated passenger deck located over a baggage compartment.
Overhaul	The systematic replacement or upgrade of revenue and non-revenue systems whose useful life is less than the useful life of the entire vehicle in a programmed manner. Overhaul is performed as a planned or concentrated preventive maintenance activity and is intended to enable the vehicle to perform to the end of the original useful life. Rolling stock must have accumulated at least 40 percent of its useful life before FTA will participate in the costs of its overhaul.
Passenger	An individual on board, boarding, or alighting from a revenue transit vehicle. Excludes operators, transit employees and contractors.
Performance Measure	An expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
Performance Targets	A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).
Purchased Transportation (PT)	Transportation service provided to a public transit agency or governmental unit from a public or private transportation provider based on a written contract. The provider is obligated in advance to operate public transportation services for a public transit agency or governmental unit for a specific monetary consideration, using its own employees to operate revenue vehicles.
Public Transportation	Is defined by law as "regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income." 49 U.S.C. § 5302(14).
Recipient	An entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a subrecipient.

Rebuild	A capital activity associated with rolling stock that occurs at, or near, the end of a unit of rolling stock's useful life, and that results in an extended useful life for the unit of rolling stock consistent with the extent of the rebuilding.
Rehabilitation (fleet)	The rebuilding of revenue vehicles to original specifications of the manufacture. Rebuilding may include some new components but has less emphasis on structural restoration than would be the case in a remanufacturing operation, focusing on mechanical systems and vehicle interiors. Does not extend useful life of asset.
Remanufacture (fleet)	The structural restoration of revenue vehicles in addition to installation of new or rebuilt major components (e.g., as engines, transmissions, body parts) to extend service life.
Replacement (fleet)	The replacement of revenue vehicles having reached the end of a minimum normal service life.
Rolling Stock	A revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.
Soft Costs	Capital expenditures that are required to complete a project but that are not spent directly on construction or procurement. These expenses are incurred on professional services that are necessary to complete the project, which include, but are not limited to, project design, project management, legal work, and testing.
State of Good Repair (SGR)	the condition in which a capital asset can operate at a full level of performance.
Stations	Includes bus shelters, passenger parking facilities, and assets related to rail stations. Rail station assets include station buildings, elevators, escalators, station-specific electrification assets, and other related components. Passenger parking facilities include both surface lots and garages.
Systems	Includes hardware and software assets necessary to operating the system. Types include communications systems, electrification, revenue collection, train control, and utilities.
TERM Lite (Transit Economic Requirements Model)	FTA analysis tool designed to help transit agencies identify their SGR deferred capital needs. (Total dollar value and by asset type), level of annual investment to attain SGR or other investment objective, impact of variations in funding on future asset conditions and reinvestment needs, and investment priorities (by mode and asset type).
TERM Scale	The five (5) category rating system used in the FTA's Transit Economic Requirements Model (TERM) to describe the condition of an asset, where 5 is excellent condition and 1 is poor condition
Tier 1 Agency	A recipient that owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (2) rail transit.
Transit Agency	An operator of a public transportation system.
Transit Asset Management (TAM)	The strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their

	performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.
Transit Asset Management (TAM) Policy	A transit provider's documented commitment to achieving and maintaining a state of good repair for all its capital assets. The TAM policy defines the transit provider's TAM objectives and defines and assigns roles and responsibilities for meeting those objectives.
Transit Asset Management (TAM) System	The strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.
Transit Asset Management Plan (TAMP)	A plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.
Unlinked Passenger trips (UPT)	The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.
Updates	A provider must update its entire TAM plan at least once every four (4) years. A provider's TAM plan update should coincide with the planning cycle for the relevant Transportation Improvement Program or Statewide Transportation Improvement Program.
Useful Life (UL)	The expected life cycle of a capital asset or the acceptable period of use in service determined by FTA. Useful life of revenue rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service.
Useful Life Benchmark (ULB)	The expected life cycle or the acceptable period of use in service for a capital asset, as determined by a transit provider, or the default benchmark provided by FTA. The ULB is the realistic expectation for when an asset would be disposed or replaced based on operating environment and procurement timelines. It is not the same as "Useful Life" in FTA grant programs.

Appendix C - Copy of ATL Xpress NTD Narrative Report (FY21)

RY21 ATL TAM Narrative Report

Xpress commuter service began operating under the Atlanta-Region Transit Link Authority (ATL) on July 1, 2020. Previously, it operated under the State Road and Tollway Authority (SRTA). The active fleet was 166 coaches for RY21. During 2022, the 2009 fleet of 20 buses will be retired and 19 new buses will be received. The active fleet for RY22 is projected to be 165.

Useful Life Benchmark – Revenue Vehicles

Target set by ATL Xpress for RY22

ATL Xpress's target for RY22 is 0% of revenue vehicles meeting or exceeding their ULB. As listed below, 0% of revenue vehicles in service are projected to have met or exceeded their useful life benchmark.

2004 Fleet (47): Rehab in 2018, ULB added 6-years, end of new ULB 2024
2011 Fleet (21): ULB 14-years, end of ULB 2025
2019 Fleet (1): ULB 16-years, end of ULB 2035
2020 Fleet (77): ULB 16-years, end of ULB 2036
2021 Fleet (19): ULB 16-years, end of ULB 2037

The 2004 fleet was rehab at the end of its useful life, added a new ULB of 6-years. The ULB for the 2019, 2020, and 2021 fleets was increased based on review of historical mileage records for older fleets, improvements in design, and to establish a level funding and procurement approach for future replacements.

ATL Xpress calculation of the targets

ATL Xpress's goal is to provide reliable service to our customers that use the commuter service. The target was set based on historical mileage history, ensuring service reliability of the assets, and meeting the Strategic Plan target of 0% of active revenue vehicles meeting or exceeding their ULB.

Xpress progress to meet the targets

A fleet replacement plan was formalized in the 2018 Xpress TAM plan aimed at ensuring that coaches would be replaced before they exceeded their ULB.

In 2019 and 2020, 77 new MCI D4500 and one MCI CRTLE went into revenue service. In 2021, one MCI D4500 was received and is in revenue service. In 2022, expecting delivery of 4 MCI D4500 and 14 MCI CRTLE.

The 2006 and 2007 fleets were retired in 2019 and 2020 prior to exceeding their ULB. The 2009 fleet is in process of being retired prior to exceeding its ULB with 8 replacements in 2020 and the remaining 20 in 2022.

Challenges facing ATL Xpress in making progress to meet the targets

Capital funding is a challenge when replacing an older fleet and becomes harder when the quantity for replacement is high. To mitigate this challenge, ATL Xpress looked at future needs and adjusted the ULB of new buses to allow for leveling of the funding requirement by year and eliminate peaks. This approach allows for replacing a lower quantity of coaches each year as they approach their ULB.

Useful Life Benchmark – Non-Revenue Vehicles

Xpress has a mixed fleet of non-revenue vehicles to support the operation of commuter service.

Target set by ATL Xpress for RY22

ATL Xpress's target for RY22 is 0% of non-revenue service vehicles meeting or exceeding their ULB. For RY21, 0% of non-revenue service vehicles in-service met or exceeded their useful life benchmark. The projection for RY22, is 0% of revenue vehicles in service are projected to have met or exceeded their useful life benchmark as defined below.

Non-revenue automobiles (9)
ATL Xpress Staff Fleet

- 2013 Truck (1): ULB-10 years, end of ULB is 2023
- 2014 SUV (2): ULB-10 years, end of ULB is 2024
- 2015 Sedan (1): ULB-10 years, end of ULB is 2025

Service Contractor Operated Fleet

- 2014 SUV (3): ULB-8 years, end of ULB is 2022 (Will be retired in 2022)
- 2015 Van (1): ULB-8 years, end of ULB 2023
- 2014 Truck (1): ULB-8 years, end of ULB is 2022 (Will be retired in 2022)

Other rubber tire vehicle (2)
2015 Truck: ULB-14 years, end of ULB is 2029

ATL Xpress calculation of the targets

ATL Xpress based the ULB on historical reliability, severity of usage and guidance from the FTA default ULB recommendations for this category. For other rubber tire vehicles (heavy-duty service trucks), the ULB is the FTA default of 14-years. Vehicles will be replaced as they reach the end of their ULB.

ATL Xpress's progress to meet the targets

The ATL Xpress staff vehicles are planned to be replaced prior to meeting or exceeding their ULB.

Vehicles assigned to and operated by the service contractor will be retired prior to meeting or exceeding their ULB and replaced by the service contractor.

Other rubber tire vehicles (service trucks) will meet the ULB in 2029. The condition of the vehicle is being monitored and proper maintenance performed to ensure it reaches the expected ULB.

In future years, funding sources will be identified and programmed to allow replacement of vehicles before they exceed their ULB.

Challenges facing ATL Xpress in making progress to meet the targets

Capital funding is the main challenge. The replacement of revenue vehicles is the higher priority. Funding for ATL Xpress staff vehicles is programmed as available. To reduce the financial burden for ATL Xpress, the new service contract requires the service contractor to provide the non-revenue support vehicles previously provided by ATL Xpress.

Facilities - Condition

ATL Xpress owns and operates one (administration, operations, and maintenance) facility and 11 park-n-ride lots for the commuter service.

Target set by ATL Xpress for RY22

ATL Xpress's target for RY22 is 0% of owned facilities rated below the minimum State of Good Repair (SGR) condition rating of 3.0. For RY21, 18.18% of owned properties rated below the minimum SGR rating of 3.0 based on the 2017 assessments. Repairs were funded and scheduled.

Condition assessment inspections were completed for all owned facilities in 2021. All facilities had composite TERM scale scores of 3.0 or better.

ATL Xpress calculation of the targets

A condition assessment of the owned and operated facilities was completed in 2017 as part of the 2018 Xpress TAM plan. The assessment found that 18.18% of the park-n-ride lots had a composite score below 3.0 on the SGR TERM scale.

A condition assessment of the owned and operated facilities was completed in 2021 as part of the upcoming updated 2022 Xpress TAM plan. The assessment found that 0.0% of the owned properties had a composite score below 3.0 on the SGR TERM scale.

The goal of Xpress is to provide safe and clean passenger facilities for customers, to accomplish this goal the Strategic Plan target was set at 0% of owned facilities rated below a 3.0 on the SGR TERM scale.

ATL Xpress's progress to meet the targets

The repairs identified for the two park-n-ride lots (Cumming and Town Center) that scored below a 3.0 on the SGR TERM scale on the 2017 assessment were prioritized both in terms of funding and implementation. At the end of FY21, funding had been allocated and projects started to complete all repairs on these two lots and an additional nine other lots to make sure they are properly maintained.

The goal is to be proactive in the maintenance of the facilities and meet the target in future years.

Challenges facing ATL Xpress in making progress to meet the targets

Capital funding is the main challenge. ATL Xpress is assessing all needs and prioritizing projects to provide the best passenger facilities possible with available funding sources.

Infrastructure – Performance Restrictions

Not applicable to ATL Xpress, no rail operations.

What targets did your agency set?
How did your agency calculate these targets?
How has your agency made progress toward its targets?
What challenges face your agency in making progress toward the targets?

Any extenuating circumstances that impact ATL Xpress's transit asset management

None for RY21.

Additional information documentation

None for RY21.

Appendix D - Reference Documents

Reference Documentation

	Document Name	Date	Version	Document Location	
1.	Xpress Fleet Maintenance Plan	12/0/2021	7.0	SRTA SharePoint	
2.	Xpress Facility Maintenance Plan	12/30/2021	7.0	SRTA SharePoint	
3.	SRTA Xpress Station and Park and Ride Design Manual	3/22/2019	1.0	SRTA SharePoint	
4.	SGR Condition Assessment Inspection - Facilities	2021		SRTA SharePoint	
5.	SGR Condition Assessment Inspection - Fleet	2021		SRTA SharePoint	
6.	2004 MCI D4500 Manual			ATL/SRTA Headquarters	
7.	2011 MCI D4500 Manual			ATL/SRTA Headquarters	
8.	2019 MCI D4500 Manual			ATL/SRTA Headquarters	
9.	2020 MCI D4500 Manual			ATL/SRTA Headquarters	
10.	2021 MCI D4500 Manual			ATL/SRTA Headquarters	
11..	2020 MCI D45 CRT LE Manual			ATL/SRTA Headquarters	
12.	2021 MCI D45 CRT LE Manual			ATL/SRTA Headquarters	
13.	Fleet Inspection Checklist			ATL/SRTA Headquarters	
14.	Facility Inspection Checklist			ATL/SRTA Headquarters	
15.	Fleet PMI Schedule			ATL/SRTA Headquarters	
16.	Work Order Samples			ATL/SRTA Headquarters	
17.	Standard Operating Procedures (SOP)			ATL/SRTA Headquarters	
18.	Fleet Warranties			ATL/SRTA Headquarters	
19.	Asset Transition and Disposal			ATL/SRTA Headquarters	

Appendix E - TAM Plan Compliance Matrix

2022 TAM Plan

Am I in Compliance with the TAM Final Rule?

1.	Do I have a TAM plan that covers a four year period?	Yes
2.	Was the TAM plan updated within the last four years?	Yes
3.	Do I have a TAM plan that includes all of the required elements? (Tier I)	Yes
	a. An asset inventory for all assets used in the provision of public transportation, including those owned by third parties?	Yes
	b. A condition assessment of all assets in my asset inventory for which I have direct capital responsibility	Yes
	c. An investment prioritization that:	Yes
	• Ranks projects to improve or manage the state of good repair over the horizon period,	
	• Includes all capital assets for which I have direct capital responsibility, and	
	• Is at the asset class level	Yes
	d. Did I document the analytical processes and decision support tools used in developing my TAM plan?	Yes
4.	Do I have documentation that I calculated performance for:	
	Equipment (non-revenue service vehicles): the percentage of those vehicles that have either met or exceeded their ULB for all assets for which I have direct capital responsibility.	Yes
	Rolling Stock (revenue vehicles): the percentage of revenue vehicles by vehicle type that have either met or exceeded their ULB for all assets for which I have direct capital responsibility.	Yes
	Infrastructure (rail fixed-guideway, track, signals, and systems): the percentage of track segments with performance restrictions for all assets for which I have direct capital responsibility.	N/A
	Facilities: the percentage of facilities within an asset group rated below condition 3 on the TERM scale for all assets for which I have direct capital responsibility. Condition assessments have been conducted within the last four years	Yes
5.	Do I have documentation that I set performance targets annually to project the following fiscal year for:	
	• Equipment	Yes
	• Rolling Stock	Yes
	• Infrastructure	N/A
	• Facilities	Yes
6.	Did my Accountable Executive approve the performance targets?	Yes
7.	Did I make my TAM plan, any supporting records or documents, performance targets, investment strategies, and the annual condition assessment report available to the State and/or MPO that provides my funding?	Yes
8.	Do I have a tier I TAM plan that includes all of the required elements?	
	a. Documentation of a TAM and SGR policy?	Yes
	b. An implementation strategy that outlines a plan to achieve its asset management goals?	Yes
	c. A written description of the key annual activities needed to implement the TAM plan for each year of the plan's horizon?	Yes
	d. A summary or list of the resources, including personnel, that the recipient needs to develop and carry out the TAM plan?	Yes
	e. An evaluation plan that outlines how I will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement of its TAM practices?	Yes

Appendix F - Sample PMI A and B Forms (Fleet Maintenance Plan)

PMI A – MCI D4500 and D45 CRT LE

SRTA A SERVICE PMI CHECKLIST MCI D4500 / D45 CRT LE SRTA COACHES								
VEHICLE #			PMI Start		PMI Completion		Technician Info	
			Date:	Mileage:	Date:	Mileage:	Name	
	Initials	Code	(√) = OK	(N) = Needs Follow-Up	(X) = Defect Corrected			
1			All DVIR's and open Follow-Ups are to be addressed prior to vehicle being returned to service.					
2			Check operation of master switch in all positions. Verify all dash and instrument, lights, turn signal, Lo-Hi, Hazards for proper operation.					
3			Verify that neutral safety switch works correctly. Start engine and check for unusual noises.					
4			Inspect driver's seat for proper operation. Ensure that seat belt functions properly.					
5			Inspect all operators instruments,switches, controls, and telltale lights for proper operation and security.					
6			Verify that both remote rear view mirrors work properly. Verify turn signals in each mirror are fully functional on 1900 and 2000 series units					
7			Check steering wheel horn button for proper operation. Check floor horn switch for proper operation.					
8			Check wiper blades and controls for proper operation. Check intermittent operation. Ensure that wipers park correctly. (4" from center post)					
9			Check windshield washer operation. Check aiming of squirted nozzles. Refill washer fluid.					
10			Check the operation of front heat and defroster controls. Verify heater and air conditioning output. Check heater control along side driver seat. Verify that valves go up and down smoothly and lock into place					
11			Check the condition and operation of all sun visors / sunscreens					
12			Check operation of the voice annunciator (Clever) Using the maintenance logon. **(ADA)**					
13			Check operation of the PA system including microphone floor switch. Ensure both interior and exterior speakers are functional **(ADA)**					
14			Check operation of low air buzzer and warning light. Buzzer should come on when pressure drops to 70 PSI and go off when pressure reaches 95 PSI					
15			Perform brake system leak down test. With engine off and parking brakes release and service brakes applied, system pressure must not drop more than 3 PSI in one minute.					
16			Perform brake system leak down test. With engine off and parking brake released and service brakes **NOT** applied, pressure must not drop more than 3 PSI in one minute.					
17			Check operation of parking brake. Pump air system down and ensure that parking brake applies at no lower than 40 PSI.					
18			Select reverse and check backup alarm, camera and light operation.					
19			Check operation of front suspension kneeling system. **Ensure kneeler raises when parking brake is released (ADA)**					
20			Verify Amerex / Kidde inspection tag and date of inspection/ 6 mo. Record date_____ Check Amerex / Kidde system. Ensure that control panel is in "OK" status.					
21			Test Fire Suppression Engine Shut Down - Engine Should Shut Down Within 30 Seconds					
22			Verify fire extinguisher charge, mounting, tag and date of inspection 1 yr. Record date _____.					
23			Check all 110v outlets and ensure that covers are in place on outlets mounted to heater duct, and that seat mounted outlets are secure. Check operation of all outlets					
24			Ensure the priority seating signs are located at each securement location, at the front row, and Title VI notice sticker is visible on side destination sign. **(ADA)**					
25			**Check All Interior Lights** Operators overhead___ Door Dome___ Interior Passenger Reading___ Aisle Lights___ Window Lights___ Blue Floor Lights_____					
26			Replace P/R blower filters, HVAC filter, EVAP filter (1900 Series Units do not have P/R filters)					
27			Check the overhead and dash stop request light and chime, Wheelchair stop request tape operation. **(ADA)**					
28			Inspect all windshield and window glass for cracks, chips, or fogging.					
29			Inspect all emergency exit windows and roof hatches for proper operation.					
30			Verify that all stanchions and handrails are secure.					
31			Verify that all seating is in good condition and properly mounted. Ensure that recline mechanism releases smoothly and locks in all positions. Check operation of all arm rests. FOR 1900 & 2000 SERIES: Check operation of passenger seatbelts					

32			Inspect interior for damage, loose screws, or modesty panels.
33			Check floor access panel for loose fasteners. Ensure that it is not a tripping hazard.
34			Check for and print out any fault codes. Download and reset trip data.
35			Verify that front and side destination signs operate properly. **(ADA)**
36			Inspect exterior of bus for body damage, to include paint and decal condition. Record all defects.
37			**Check All Exterior Lights** Head Lights Lo-Hi___ Hazards Lights___ Marker/Clearance___ Turn Signals___ Brake Lights___ Tail Lights___ Decal Lights___ Curb/Sidewalk Lights___ Back-Up Lights___ License Plate Lights___
38			Check that all three emergency triangles are in good condition and are properly mounted in their container.
39			Check alternator for leaking seals, loose mounting bolts, and noise under load. Verify that positive battery cable support bracket is in good condition and cables not chaffed and terminals are secured. For EMP 450 alternators, check air intake hose and screen to ensure they are in good condition
40			Inspect engine compartment for unsecured or rubbing wires, hoses, or leaks. Physically touch all hoses and clamps to check for defects.
41			Visually inspect the holding/recovery tank, recovery pump, surge tank, fill nozzle, pressure relief valve, and sight glass. Repair any damaged or leaking components. Verify operation of the coolant pump. Fill from bottom only.
42			Inspect all drive belts for cracking, chafing, and rib damage. Ensure that all belts are adjusted to proper tension and are properly aligned. Verify operation of oil pressure operated tensioner for cooling fan belt. **FOR 1900 & 2000 SERIES:** Run fan test from rear switch box
43			Inspect and grease fan belt tensioner spiral groove bushing.
44			Check for any visible fluid leaks in the engine compartment.
45			Check transmission and power steering fluid levels.
46			Take engine oil sample **FROM PROBILIZER PORT** Change engine oil and filters.
47			Inspect front and rear shocks for signs of leakage or damage.
48			Lubricate entire chassis at all grease points.
49			Check differential breather, oil level and adjust as necessary.
50			Check condition of front, rear, and tag axle inner wheel seals. Inspect brake drums or rotors for wear.
51			For disc brakes, if the indicator shows more than 75% wear: The pads require further inspection or replacement. **NOTE: If the indicator is flush with the caliper or not showing, pads and or rotors must be replaced before bus returns to service**
			Measure and record brake shoe lining thickness. NOTE: Any lining that is less than 10/32" thick at the wear indicator must be replaced before bus is returned to service. For disc brakes, measure and record how far the pad wear indicator protrudes from the caliper
			Left front _____/32" Left Drive _____/32" Left Tag _____/32"
			Right front _____/32" Right Drive _____/32" Right Tag _____/32"
			Disc Brakes are Not Applicable (NA) to number 52
52			Measure and record brake chamber rod travel. Travel should not exceed: Front and Tag 1"- 1 3/4" Drive 1 1/2"- 2"
			Right front _____in. Right Drive _____in. Right Tag _____in.
53			Inspect all tires and wheels for damage. Any tires less than 4/32" tread depth must be replaced
			Left Steer _____/32" Inside Drive _____/32" Outside Drive _____/32" Left Tag _____/32"
			Right Steer _____/32" Inside Drive _____/32" Outside Drive _____/32" Right Tag _____/32"
54			Check oil level in front axle and tag axle hub caps. Add oil as necessary. Check for leaks.
55			Perform discharge test on air compressor.
56			Drain all air reservoirs. Check for signs of water contamination and the presence of oil in the air system. Flush if necessary
57			Inspect front and rear air bags and leveling valves for leakage and proper ride height. Correct ride height is 11" between mounting plates on front and rear axle air bags.
58			Record air pressure in each tire **BEFORE ADDING / REMOVING AIR:**
			Left Steer _____PSI Inside Drive _____PSI Outside Drive _____PSI Left Tag _____PSI
			Right Steer _____PSI Inside Drive _____PSI Outside Drive _____PSI Right Tag _____PSI

59			Inflate tires to correct spec for the unit. See chart below **Units 300-347, 5017-5044:** Steer: 120PSI Drive: 100PSI Tag: 85PSI | **Units 5045-5065:** Steer: 120PSI Drive: 100PSI Tag: 90PSI | **Units 1901-1977:** Steer: 120PSI Drive: 100PSI Tag: 100PSI | **Units 2001-2015:** Steer: 125PSI Drive: 100PSI Tag: 120PSI
60			Check operation of wheelchair lift through entire cycle. Check operation of sliding entry door air assist and threshold alarm. On 1900 and 2000 series units, check that camera appears on dashboard when upper door is open.
61			Pressure test cooling system and inspect for leaks.
			WHEELCHAIR LIFT / RAMP INSPECTION
62			Check operation of wheelchair lift / ramp through entire cycle. Check operation of sliding entry door.
63			Ensure that all safety features are functioning properly including safety belts and audible alarm.
64			Check operation of brake / accelerator interlock with lift / ramp deployed.
65			Inspect hydraulic lines for leaks and proper routing.
66			Check hydraulic oil level in pump reservoir.
67			Check mechanical components, bushings, and bearings for sticking, binding, wear, or excessive play.
68			Lubricate lift / ramp at all wear points.
69			Check operation of all sliding seats and ensure that they lock in both positions. Lubricate track slides and latches.
70			Check all wheel chair restraints and seatbelts for condition and proper operation.

Mechanic Completing Inspection **Date** **Supervisor Signature** **Date**

Revised April 13, 2020

This certifies that the inspection documented on this form complies with the 49CFR 396.17-23.

PMI B – MCI D4500 and D45 CRT LE

SRTA B SERVICE PMI CHECKLIST **MCI D4500 / D45 CRT LE SRTA COACHES**								
VEHICLE #			**PMI Start**		**PMI Completion**		**Technician Info**	
			Date:	**Mileage:**	**Date:**	**Mileage:**	**Name**	
	Initials	**Code**	**(✓) - ok**	**N) = Needs Follow-U**	**(X) = Defect Corrected**			
1			**Complete all items on the A PM Inspection checklist first. Then complete B**					
2			Check the operation of the entry door, control linkage, levers, gears, and bearings. Check door seal gap.					
3			Grease entry door hinges and bearings.					
4			Lubricate driver's seat slides with spray lithium grease if needed.					
5			Clean and lubricate all emergency exit window lock latches, seals, and hinges.					
6			Check air compressor efficiency. Air pressure must build from 85 PSI to 100 PSI in 40 second at full governed RPM. Build up time _____ secs.					
7			Clean battery tray and lubricate slides. Inspect battery hold downs and check cables for chafing.					
8			Disconnect **ALL** cables and test all batteries individually.					
9			Clean battery posts and all cable connections. Reinstall cables and coat all terminals with protecting coating.					
10			Check generator output at idle with all lights and blowers on. Voltage should be approximately 27 to 28 VDC.					
11			Inspect condenser coil and repair any bent fins using a fin comb. Clean coil if required.					
12			Replace Engine Air Filter					
13			Replace fuel filter element(s) the 1900 and 2000 series units have 2 filters					
14			Check the condition of the radiator, cooling fan, fan clutch, and shroud. Replace any damaged or leaking compon					
15			Check condition and operation of coolant circulating pump, and coolant lift pump					
16			Check turbocharger for oil leaks or any discoloration of housing. Check oil supply and return lines for general condition and leaks.					
17			Inspect entire exhaust system. Ensure that all piping and clamps are secure. NO LEAKS ARE ACCEPTABLE !					
18			Check condition of exhaust blanket and heat barriers.					
19			Check air compressor intake for restrictions and clean as necessary.					
20			Inspect kazoo drain valves on A/C condensate drain lines and clear out debris. Replace valve as necessary.					
21			Inspect the condition of all radius rods, lateral rods, sway bar links, and all suspension bushings.					
22			Inspect kingpins for wear or damage. Inspect draglink and tie rod ball studs for wear and endplay.					
23			Check and record air governor cut in and cut out settings. Cut in _____ PSI Cut out _____ PSI					
24			Adjust air governor to cut in at 105 PSI and cut out at 125 PSI. **For 1900 &2000 Series: Cut Out is 134 PSI**					
25			Remove and clean transmission breather.					
26			Replace crankcase filter.					

_____ _____

echanic Completing Inspecti Date **Supervisor Signature Date**

Revised April 13, 2020

This certifies that the inspection documented on this form complies with the 49CFR 396.17-23.

Surplus Asset - Contingency or Disposal Request and Tracking Form - Vehicles

Agency Select **Department** Select

Surplus Asset Information

Asset #		EAMS #		Barcode #	
Description					
Manufacturer		Model			
Part #			VIN or SN		
Condition	Select	Quantity		Status	Select

In Service Date		In Service Mileage	
Out of Service Date		Out of Service Mileage	

FTA Useful Life	Years		Mileage	
FTA Useful Life Met	Years		Mileage	Select
Remaining UL	Years		Mileage	0

Acquisition Cost	
Current Value (straight line depreciation)	
Fair Market Value (estimated)	

Asset Location

Facility	Select	Address	Select		
City	Select	State		Zip Code	Select
County	Select				

Reason for Disposal of Surplus Asset

Select

If Other-Provide Reason

Funding Information

Grant Number(s)

Fedral % | State % | Local % | Other %

Proposed Disposal Methods

Select

Request/Approval/Transfer Routing

Requested By | Department

Approved By | Title

GADOAS (if Applicable)

Received: Select | Approved: Select | Completed: Select

Asset Contact

Name | Email

Address: Select | Phone

City: Select | State: GA

County: Select | Zip Code: Select

Receiving Agency/Company (if applicable)

Name | Phone

Address

Contact

Email

Surplus Asset - Disposal Request and Tracking Form - Equipment

Agency Select **Department** Select

Surplus Asset Information

Asset # | EAMS # | Barcode #
Description
Manufacturer | Model
Part # | Serial Number
Condition: Select | Quantity | Status: Select

If more than 1, include spreadsheet list

In Service Date
Out of Service Date

Acquisition Cost

Current Value (straight line depreciation) $ -
Fair Market Value (estimated)

Asset Location

Facility: Select | Address: Select
City: Select | State | Zip Code: Select
County: Select

Reason for Disposal of Surplus Asset

Select

If Other-Provide Reason

Funding Information

Grant Number(s)

Federal % | State % | Local % | Other %

Proposed Disposal Methods

Select

Request/Approval/Transfer Routing

Requested By | Department

Approved By | Title

GADOAS (if Applicable)

Received: Select | Approved: Select | Completed: Select

Asset Contact

Name | Email

Address: Select | Phone

City: Select | State

County: Select | Zip Code: Select

Receiving Agency (if applicable)

Agency Name | Email

Address

Contact | Phone